The **essential** magazine for Amiga enthusiasts

AMIGA SHOPPER

Issue 61 April 1996 £4.25 US$8.95 • Guilders17.50



Games mastered!

The programs and languages you can use to write your own Amiga games

Ultimate DIY

The essential guide to souping up your Amiga starts this issue

TurboPrint 4.1 Light

Plus much more – see back cover

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Shopper**Reviews**



- Canon BJC-610: Can this new printer from Canon rival the Epson Colour Stylus?
- Final Writer 4 Lite: Is this new DTP package really comparable with QuarkXPress?
- Blitz Basic 2.1: The latest version of the programming language from Acid Software.
- Modem: A full hardware and software Internet pack.
- Four Square drive: Brian Fowler's new floppy drive.
- AMOS Pro Compiler 2: F1 Licenceware re-release this handy program to make your AMOS coding faster.
- Counting House: An impressive new business manager from ARK.

Shopper**Tutorials**

HiSoft BASIC
The first installment of our new programming tutorial explores Operating System support mechanisms.

Music
It's easy to make great-sounding music with your Amiga. This month we discuss sequencing.

Comms
All about Internet Relay Chat and how you can hold conversations with users all over the world.

AMOS
Top 20 AMOS tips to round off our great tutorial.



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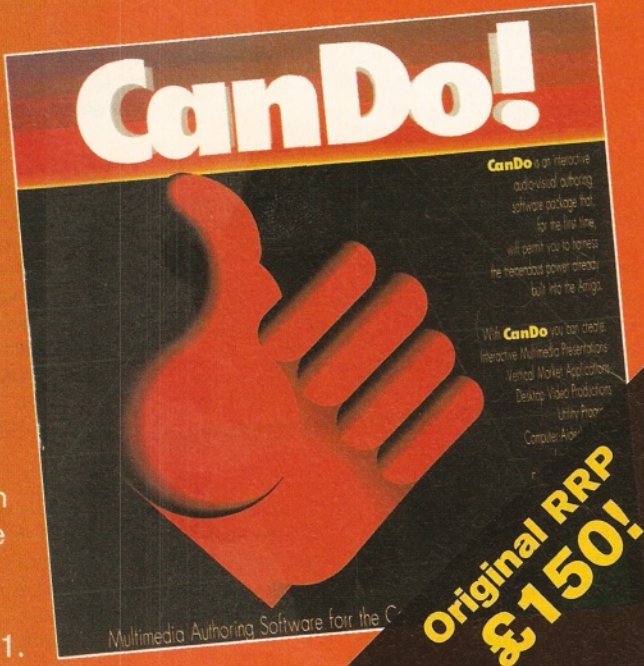
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Next **month**

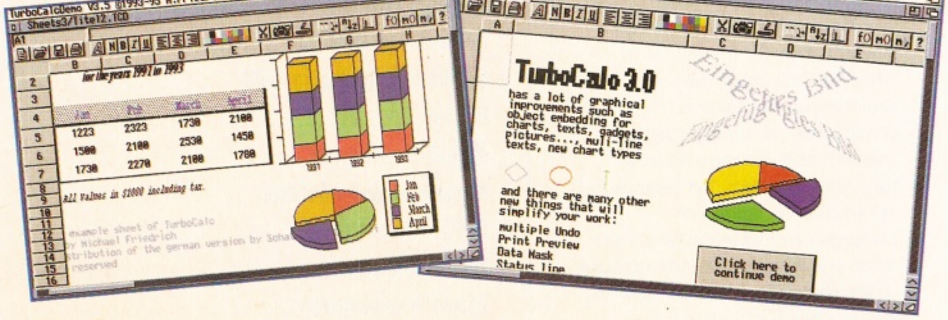
CanDo 2.51

On the front of next month's issue you will find a full, three-disk package of the acclaimed CanDo program from Inovatronics. Version 2.51 offers incredible flexibility and power from within an easy to use interface. Originally retailed at £150, you can use CanDo's versatility to create anything from multimedia projects to complete standalone programs with their own interfaces. We are anticipating unprecedented demand for this issue, so we strongly recommend that you use the form below to reserve your copy in advance. Alternatively, you can use this as an excuse to become a subscriber, ensure your copy of this and future issues and get our Subscribers' disk free every month. Call our Subscription hotline on ☎ 01225 822511.



TurboCalc 3.5 demo

Of course, that's not the only thing that will be packed on to our next issue's disks. There will also be a demo of one of the Amiga's best-known spreadsheets, TurboCalc 3.5 from Digita. There will be an opportunity for readers to take advantage of an exclusive upgrade offer and save £££s! Then, as usual, there will be more top programs from the Shareware world included too. And all of this is before you even open the feature-packed magazine, which will have red hot reviews of all the latest products and the second part of our Amiga DIY feature, as well as all the regulars, from Amiga Answers to the best PD section around, plus our informative tutorials. Don't miss out!



May issue **62.** On sale Tuesday, **2nd April** 1996

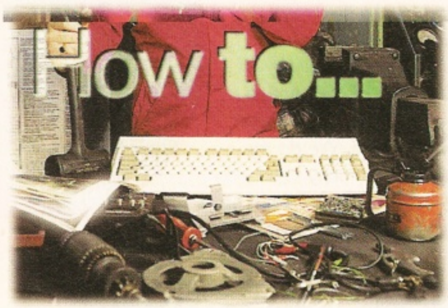
The essential magazine for Amiga enthusiasts

AMIGA SHOPPER

ShopperFeatures

Interview ____ 22
To find out what Amiga Technologies are up to, **Sue Grant** talks to Gilles Bourdin.

Games mastered! ____ 24
Games may never feature in Amiga Shopper, but we still want to know how to create them. **John Kennedy** explores the software available.

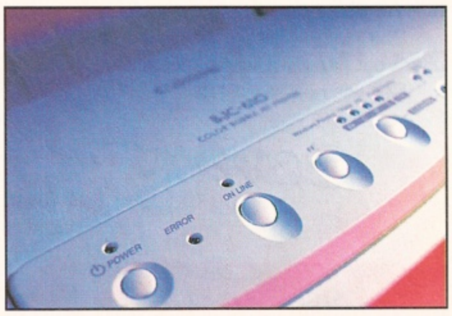


Ultimate DIY ____ 28
Over the next few issues, we will be running a feature exploring the various ways of expanding and enhancing your Amiga. **Dave Taylor** and **John Kennedy** kick off this new series.

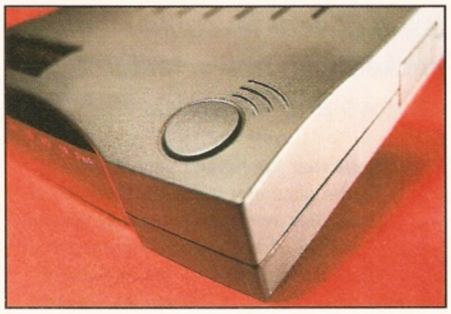
ShopperReviews

Final Writer 4 Lite ____ 36
Larry Hickmott reviews the new, cut-down version of Final Writer 4 from Softwood.

Canon BJC-610 ____ 39
The Epson Colour Stylus has competition in the form of Canon's latest printer. **Larry Hickmott** gives the BJC-610 a test run.



Believe it or not, this is the Canon BJC-610. (Nick got a bit carried away on the photoshoot!)



The new modem from Online PD is bundled with a software pack to cover all aspects of Comms.

ShopperReviews

Blitz Basic 2.1 ____ 41
Paul Overaa reviews the latest version of this powerful programming language.

Mr. Modem ____ 42
This new modem comes with a bundle of Comms software. **David Taylor** gets connected.

Four Square drive ____ 43
Brian Fowler's new HD floppy drive is slim and sexy. **David Taylor** reviews his competition.

AMOS Pro Compiler 43
F1 Licenceware have re-released Europress's AMOS extension. **Steve Bye** takes a look.

Counting House ____ 44
This brand new business manager from ARK is certainly impressive. But is it any good? **Larry Hickmott** finds out.

CD-ROMs ____ 47
David Taylor reviews two, brand new CD-ROMs that sit perfectly with our Ultimate DIY feature on page 28.

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Music ____ 58
Darren Irvine and **John Kennedy** explain how to get started with Amiga music making. This month, they discuss sequencing.

AMOS ____ 60
In the last of our AMOS tutorials, **Steve Bye** has compiled 20 top tips for you.

Comms ____ 62
Want to chat on the Net? **Darren Irvine** can help with his explanation of IRC.

ShopperRegulars

Coverdisks ____ 6
We have some more stupendous programs and utilities for you on both of our Coverdisks: TurboPrint 4.1 Light, Wordworth extras, sample patches for Aural Synthetica, plus loads more!

News ____ 14
Amiga Technologies sign deal with Viscorp; two new printers from Canon; a LightWave landscape generator; new ARexx compiler; plus, win a Siamese System pack from Hi-Q.

Amiga Answers ____ 50
We have answers to all your IntOS problems this month, and a few of your frequently asked questions are solved too. Remember, you can also win a handy £25 if your image is printed here, so keep your entries flowing in.

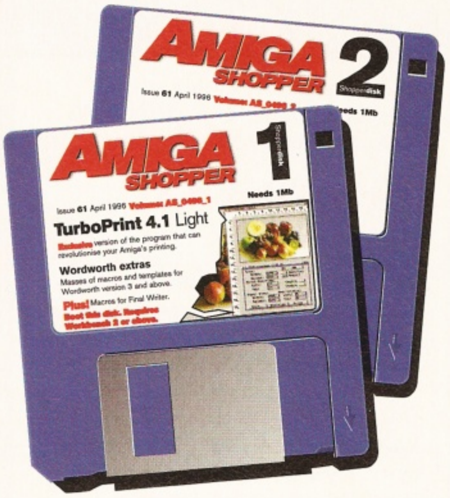
Public Domain ____ 68
More excellent programs from the Public Domain reviewed by our very own **Dave Taylor**.

Letters ____ 78
Win 25 quid for letter of the month. Plus, the winners of our CD competition are announced.

Next month ____ 82
We have another stunning issue for you next month. On sale, Tuesday, 2nd April 1996. Don't miss it, reserve your copy today!



The slim and sexy new HD floppy drive from Brian Fowler Computers.



Cover**disks**

TurboPrint 4.1 Light

Time for your printer to dance with joy as Amiga Shopper gives you TurboPrint 4.1 Light, the Amiga printing enhancement package from IrseeSoft. Roll those desktop presses while **Larry Hickmott** *shows you how to make beautiful pages.*

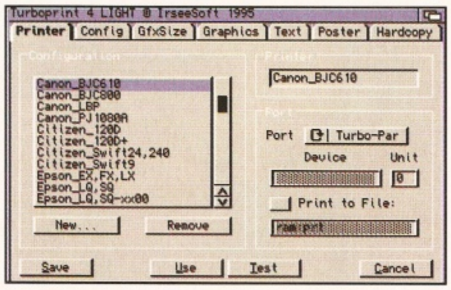
This month, Amiga Shopper is giving away a light version of IrseeSoft's acclaimed printing enhancement package, TurboPrint 4.1. With TurboPrint 4.1 Light helping you, you can forget all about those dreadful Amiga printing preferences programs and treat yourself to great-looking hard copy.

TurboPrint 4.1 Light

TurboPrint 4.1 Light is a printing enhancement package. It replaces your normal Amiga preferences with its own set of printer preference functions, as well as coming with up to date printer drivers for the very latest printers. The best way to tell you about all of its great features is to take you on a grand tour.

Using the program

TurboPrint 4.1 Light can be used from its floppy disk (preferably a copy of), or installed on a hard drive and used from there. Hard drive installation is taken care of by the familiar Commodore Installer that you all know and love.

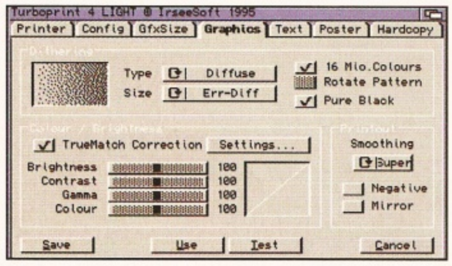


TurboPrint 4 Light supports the latest printers, such as the Canon BJC-610 *(see page 39).*

When TurboPrint 4.1 Light is installed on your hard drive, an icon for the preferences program will be placed in your Prefs drawer so you can choose to run TurboPrefs from either TurboPrint's drawer or from Prefs. TurboStart can also be placed in the WBStartUp drawer so TurboPrint is running when you start your Amiga.

Once you've opened TurboPrint's directory on your hard drive or the TurboPrint disk icon, you will see a number of programs. The main ones are TurboPrefs and Print Manager.

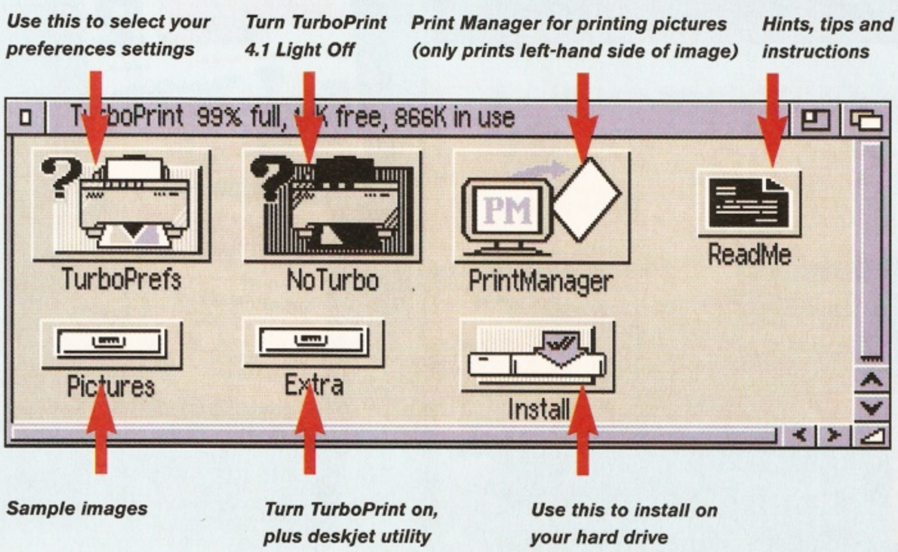
TurboPrefs is where you choose the printer driver to use, the page size and many other settings. Print Manager, on the other hand is a picture printing program.



The dithering used to simulate shades of grey and colour is controlled from the Graphics Preferences panel.

The version of Print Manager that comes with TurboPrint 4.1 Light has one very noticeable limitation in that it will only print the left-hand side of the image. This allows you to see the great quality you can get with this program should you wish to upgrade to TurboPrint 4.1 Professional.

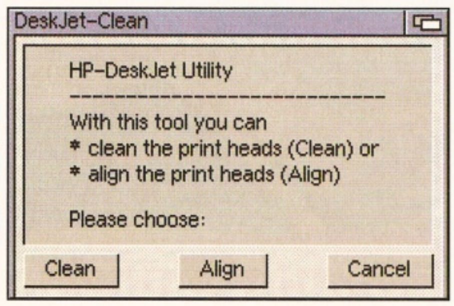
The meaning of icons...



Setting up for your first print

Before you can use Print Manager, you will need to set your preferences in TurboPrefs. Do this by opening (double click on) the TurboPrint disk icon and then do the same with the TurboPrefs icon.

The first task with TurboPrefs is to tell it what printer you have by choosing one of the printer drivers from the list gadget. If your printer



TurboPrint 4.1 Light comes with a free deskjet utility for the new range of Hewlett-Packard deskjet printers that now require software for cleaning the print heads.

Talking shop

This month in Talking Shop: service with a smile; revamp the Amiga's OS; keep AMOS alive; CD competition results; bundle blues and lots more!

Good service should be the norm rather than the exception. Fortunately, we don't get many letters of complaint from our readers. And it's always nice to hear from a satisfied customer...

Star service, star letter


£25 Winner

I recently purchased a new Canon BJC-70 colour printer. It's a little beauty, with little being the operative word for it! Anyway, as you're undoubtedly aware, this type of printer is nearly always only shipped with printer drivers for Windows and DOS on the IBM PC. This, of course, may be standard procedure with any new printer these days, and it shows a willingness to help the end user get better results.

Unfortunately, this is no benefit to us lucky Amiga users! I'm a registered user, though, of the excellent Studio 2 printing enhancement package, and whilst I'd undoubtedly have been able to find a 'suitable' printer driver, there is not a 'dedicated' one for the BJC-70, unlike for most others in the Canon range. When I returned the warranty card to Canon (UK) Ltd., I included a letter explaining my concerns. Bearing in mind that this letter was only sent on a Monday morning, I was very pleasantly surprised to receive two separate envelopes with the Canon stamp on them in the early Thursday morning post.

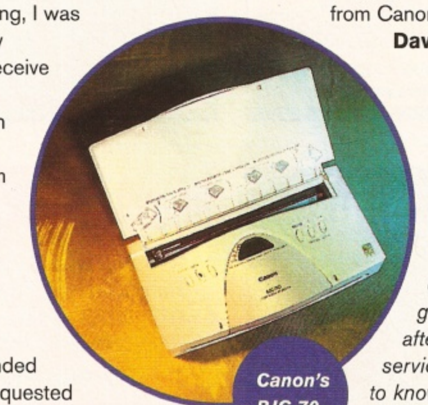
One envelope contained the two-year extended warranty I'd requested (a steal at £25!), while the other, from a separate Canon department (obviously the one responsible for producing/ updating printer drivers), contained a disk full of Canon printer drivers. As I found out in a ReadMe. file, it was actually a cut-down version of Canon Studio, although obviously a fairly recent one since it contained a BJC-70 specific driver.

But whilst even this one works perfectly, not satisfied with what they'd already done for me, they'd also included a letter with a reference number and telephone number on it explaining that they were currently working on a new BJC-70 printer driver for the Amiga and that I would receive it free of charge as soon as it was available!

All this just goes to prove that they had read my letter thoroughly and not only taken note of the points I raised, but acted on them almost immediately! Now that's what I call great service. I have absolutely no reason to doubt that every customer is, or would be, treated any differently.

I'd be very grateful if you include this letter by way of thanks and appreciation for their efforts, and to make fellow readers of Amiga Shopper aware of basically what should be expected of any major company, but the level of service they will definitely receive from Canon UK.

David S. Duncan
Chester,
Cheshire


Canon's BJC-70.

Thanks for your letter David. It's always great to hear when companies give excellent after-sale service. If you want to know more about the Canon BJC-70, read the printers Supertest in our July 1995 issue, where we awarded the BJC-70 a very respectable 88 per cent. (For back issues ☎ 01225 822511.) We have reviewed Canon's new BJC-610 printer on page 39.

AT contacts

If you want to contact Amiga Technologies, write to the following addresses:

John Smith,
Amiga Technologies GmbH (UK), Hunting Business Aviation Buildings, 1st Avenue, Stansted, Essex CM24 1QQ.
☎ 01279 680617.

Petro Tyschtschenko,
Amiga Technologies GmbH, Berliner Ring 89, D-64625 Bensheim, Germany.
Fax: 0049 6252 709 520
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What's your game?

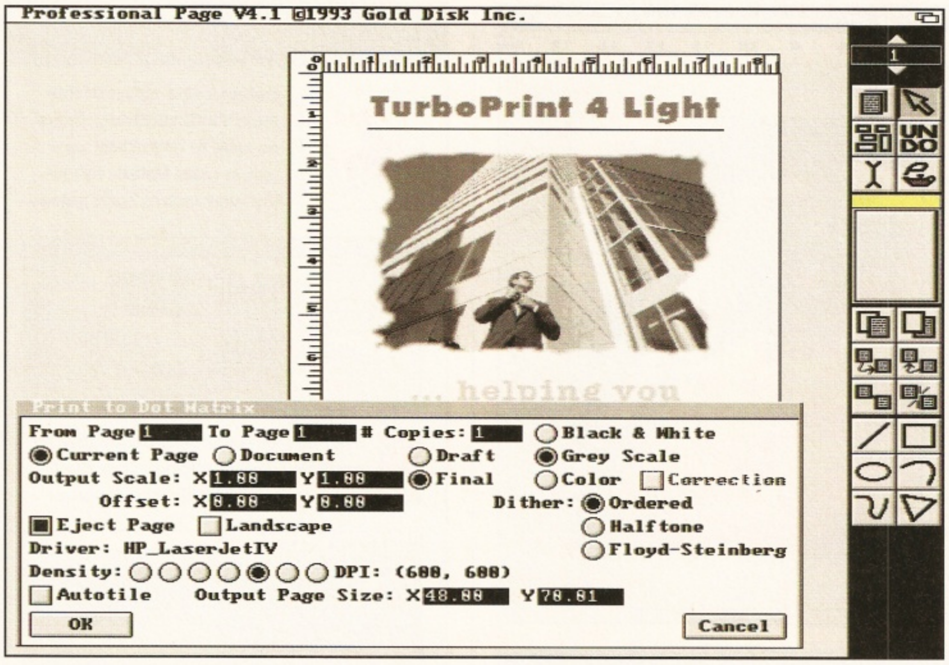
It grieves me much to see my beloved Amiga reduced to a games machine, for which it seems games programmers cater for no longer. This is the perceived view of those who know no better. Why isn't the Amiga up there amongst the PC and the Mac? It should be! Was it Commodore's poor marketing strategy? Was it the ignorance of the computer buying public? Was it the Atari bashing and smug arrogance that made us fail to see the imminent rise of the PC? Was it piracy?

Who cares, the Amiga is back! We only need to know one thing, how will it once again reign supreme in the home and be a serious alternative to the PC or Mac in the business world? Not just in niche applications such as video titling, FX etc., but in much wider areas.

There is only one answer, software. Simple, isn't it? I said simple, not easy, just about every Amiga magazine I read including yours (I won't patronise you by saying it is the best), says there is an abundance of serious software for the Amiga – there is software, and then there is SOFTWARE. What's wrong with Amiga software.? In a word, non-standard. Uniformity is one thing I've come to appreciate of the PC. I can flip from one program to another knowing the icons are standard, as are the keyboard short-cuts and interface, which is conducive to productivity and comforting when you are learning to cope with a new package. Also helpful are the on-screen tutorials. The days of the computer buff are over, computers are for the masses these days.

Bill Gates had a vision, and despite a poor Operating System to begin with (it's getting better), and not very exciting basic hardware (without third party add-ons you'd be pushed to get a beep out of the PC), along with some dodgy multitasking, Microsoft software is now the driving force behind the PC's success.

Think what the Amiga could achieve with the right software, it has better basic hardware and superior multitasking to the PC. The inferiority is software and a now-dated OS, some say the way to go is RISC architecture. What happened to the Archimedes? Acorn's RISC super machine (technically it knocks spots off the Amiga and everything else), no



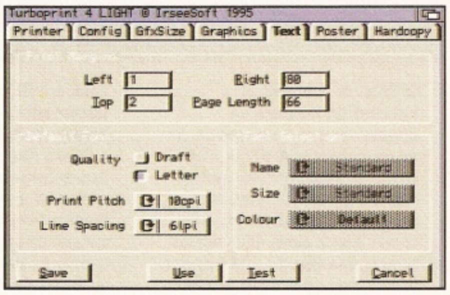
Dodgy disk?

To avoid errors when installing to floppies, ensure that your destination disks are of high quality. If an error occurs, try re-booting and using a different spare disk – the majority of errors are caused by faulty destination disks.

If your Coverdisk absolutely refuses to work and you are certain it is faulty, please return it, along with an S.A.E., to:

Amiga Shopper Coverdisk
(insert the name of the disk),
TIB plc, TIB House,
11 Edward St., Bradford BD4 7BH.

Left:* *TurboPrint 4.1 Light lets you print better quality pages from applications like ProPage on the latest printers, like the Hewlett-Packard DeskJet 850C and the Canon 610.
Below:* *The attributes for pages being printed from text-based programs can be set in TurboPrint 4.1 Light.



Writer, Wordworth, Deluxe Paint and so on. To really give TurboPrint a test, try printing a page with some text and a picture on it. Make sure that the image has lots of colours like a photograph, because it is this type of image that a standard Amiga has real trouble with.

When you have created your page, choose Print and wait for the page to emerge from your printer. The quality of the print depends on your printer and the chosen resolution.

The great thing about TurboPrint 4.1 Light is that if you want to change the output, you have a number of options open to you that you wouldn't normally have with the standard Amiga printer prefs.

I should also point out that there are even more functions included in the full version of TurboPrint 4.1 Professional, which is available as an upgrade from TurboPrint 4.1 Light. See the box below for details. ■

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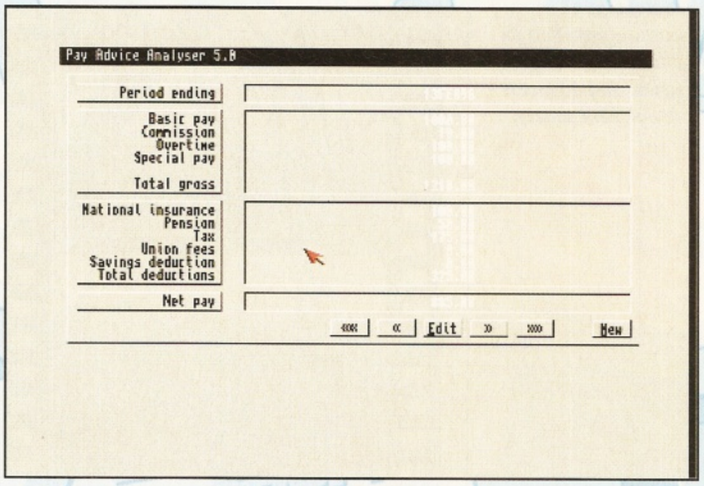
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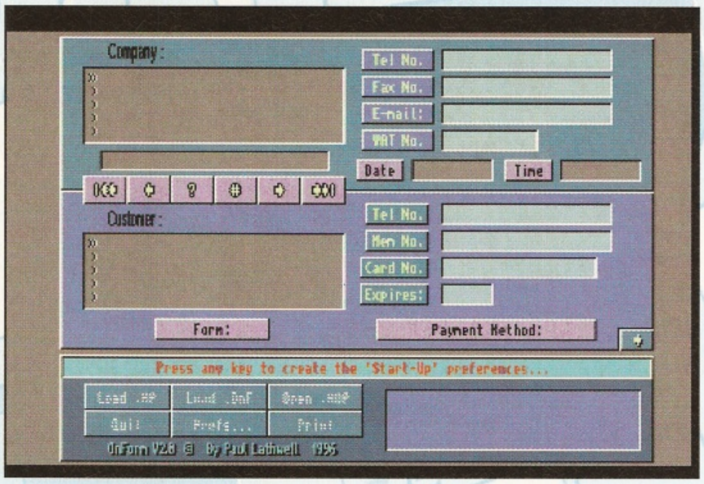
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Pay Advice has now reached version 5 and although competent, it should have advanced a bit further by now and needs more features.



OnForm 2 is a very friendly invoicing program that enables you to generate forms for your customers with simplicity.

slips, which makes it all a bit pointless. Earlier versions of this program had promise, but I think that by version 5 it should have more functions than it does. As it is, it's probably better, if a little more fiddly to set up your custom file in a database or spreadsheet. That's what I've done (in Final Data 2, in case anyone's interested and a damn fine job it does too).

Verdict: 70%

OnForm 2

Well, that'll teach me to shoot my mouth off. Last month I said that Invoicer was the only real choice for generating invoices on your Amiga. What lands on my desk this month but a different invoicing program! OnForm 2 shows just how accessible and competent AMOS programs can be. It guides you through entering your own data which will be used on StartUp. Then, to generate an invoice, you just enter the company name; and then go to the next screen and enter details and amounts.

When you are entering your details, you can't backspace to a previous line if you make a mistake (as I did) and have to go back and edit it later, which is a minor niggle. Also, can we get rid of the standard AMOS requesters in the next version, please. There are plenty of procedures

Licenceware

AMOS is back with a vengeance. Our AMOS tutorial may (or may not) be drawing to a close, but there are still masses of things for AMOS programmers. In addition to the reviews of related products in this section, you can read from our review on page 43 that the AMOS Pro Compiler has been re-released and is now available for a bargain price of £15 from the mail order pages of this issue (See page 67, ☎ 01225 822511). Enough self-promotion though, because the Licenceware section has other products to offer too.

AMOSzine 10

Is this the longest-running AMOS disk mag? Probably. So it is somewhat surprising to find that the editor has become very disillusioned with the lack of feedback and support that he is receiving. The diskmag contains a huge number of articles which range from readers' letters and



The main screen from A Tour Through Time.

general chat to hints and tips and information for programmers. The issue comes on three disks with two of them containing archives of source code. Some of the articles are quite sombre with growing disillusionment over the Amiga's recent history.

OK, the Amiga isn't back at number 1 just yet, but there have been some pretty mitigating circumstances. Let's see what Escom can do about sorting its UK sales staff out before we starting sticking the knife in, eh fellas?

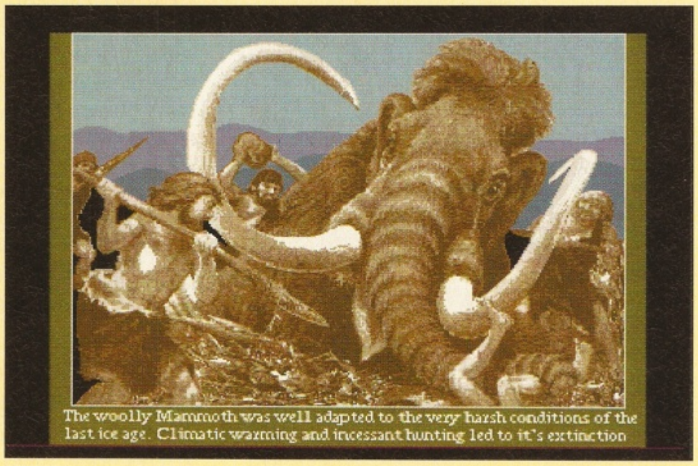
Verdict: 85%

Music & SFX For...

...Space And Shoot-'Em-Up Games, is the rather extended title of this disk. Guess what? It contains music and sound effects for programmers to use in space and shoot-'em-up games. No, really, it does! OK, joking aside [That was a joke? – Ed], the good news is that you can hear the quality you can expect for yourself,



The Tour contains much supplemental material all accessed through the ...



...main program, making it a true interactive educational experience.

Public Domain

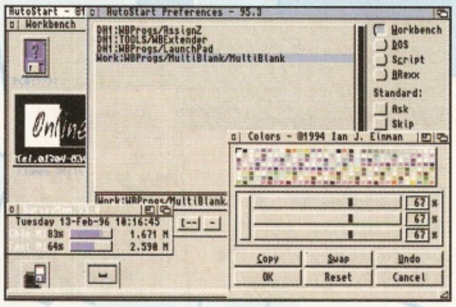
David Taylor *takes a good, long look at the submissions for this month's PD Select. And he has found some real jewels in the crown. Probably.*

Part of the wonderful world of publishing is the magazine lunches that occur every so often when we convince our publisher that we deserve one. In the debris of loud music and drunken laughs that followed one such lunch, the sober Amiga Shopper team sits here sorting out the good from the bad for this month's PD. Thankfully, there's more good than bad; otherwise there could have been some seriously derogatory comments in this month's section.

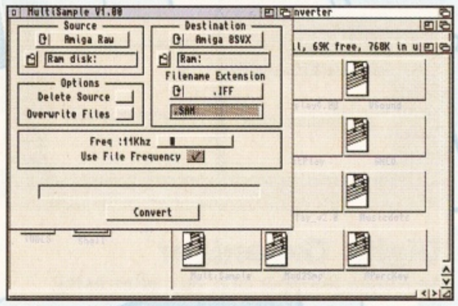
Flummy Utilities 4

This compilation of utilities looks a little like the Utility Zone from our Coverdisks. It contains a set of cracking programs, but if you're a regular reader of AS, you'll already have them from our disks. If you haven't then Flummy Utilities is an ideal disk which supplies many of the programs that are used in our How to... feature this month (see page 28), as means of enhancing Workbench. There's AutoStart, which is a very good program for your Workbench StartUp drawer. It enables you to select which programs are launched and gives you the chance to stop them if you need the extra RAM.

MultiBlank is an easy-to-use screen blanker which has quite a few different screens. AddPower is a commodity that can fulfil the role of many other little programs in one go; it can add functions to your mouse, change the way windows are used, add assigns and expand the CLI. There's also Associate, Colors, SurveyMem and TrashIt; all fine programs. And if that all sounds familiar, that's probably because those are the contents of the Utility Zone found on the disks of AS56, so it's no wonder it's a good compilation.



A fantastic selection – not surprising because it has the exact contents of AS56's Utility Zone.



A selection of utilities for Amiga musicians which contains some useful programs.

Verdict: 90% Star buy

Who, what, where, when, why, how...

Product	No of disks	Type of product	Price*	Supplier	Contact	Verdict	Page
Flummy Utilities 4	one	Utilities	75p + 75p	Online PD	01704 834335	90%	68
Hit Kit 2	one	Utilities	90p + 50p	Roberta Smith DTP	0181 455 1626	90%	69
Amiga Logo Advert	three	Animation	£2.97 + 70p	Software 2000	01827 287377	80%	69
Deformed	one	Demo	75p + 75p	Online PD	01704 834335	70%	69
DOpus 5 Utilities	two	Utilities	£2 + 50p	Pixel Digital PD	0151 259 4017	90%	69
Pay Advice 5	one (3955)	Application	£1 + 50p	17-Bit Software	01924 366982	70%	69
OnForm 2	one	Application	80p	Saddletramps PD	01709 888127	90%	70
AMOSzine 10	three	Diskmag	£5.99	F1 Licenceware	01392 493580	85%	70
Music & SFX	one	Music	£3	Andy Soar	See PD Directory	87%	70
Iconian 2.94e	one	Application	£1.50	Sadeness PD	01263 722169	95%	71
A Tour Through Time	three	Educational	£5.99	F1 Licenceware	01392 493580	80%	71
Whitby AMOS Club	one (FDE-001)	Diskmag	£2.95	Fifth Dimension	01709 888127	80%	71
Fiasco 1.1	620K	Application	n/a	aminet/biz/dbase/	fiasco.lha	95%	73
Art Pro	128K	Application	n/a	aminet/gfx/conv/	ArtPRO0.94.lha	85%	73
Blacks Editor	157K	Application	n/a	aminet/text/edit	BED_v39.lha	90%	73
Digital Utilities 3	one	Utilities	£1 + 50p	Pixel Digital PD	0151 259 4017	95%	73
Out Of Space 3	one (AM014)	Diskmag	£1 + 50p	Môn PD	01248 714591	75%	75
Analyser	one	Application	£2	John J. Cassar	see AS58	90%	75
Sauce'n'Code	one	Diskmag	90p + 50p	Roberta Smith DTP	0181 455 1626	90%	75

Some prices listed here include postage and packing charges; buying more than one disk from a PD house is likely to reduce the price per disk; check compatibility of the program with the PD House before purchasing. More information on all the PD Houses and their prices can be found in the PD Directory on the Coverdisks.


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Talk is cheap

Want to chat on the Net? **Darren Irvine** *explains all about the IRC and how to hold your own conversations with other users around the world.*

IRC (Internet Relay Chat) was originally written by Finnish programmer Jarkko Oikarinen in 1988, and the Finns are still all over the place on IRC. It's full of Americans too, but an increasing number of UK users are making their presence felt (OK so most of them are students, but you've got to start somewhere). Jarkko originally intended IRC to be a replacement for the Unix "Talk" command, but it has developed into something much more useful than Talk ever was.

IRC is basically a real-time conferencing system, allowing Internet users around the world to meet in discussion areas known as "channels", and hold a conversation as if they were all in the same room; rather than connected to diverse computer systems anywhere on the planet.

IRC uses a client-server model of operation, where individual users run "client" software on their computers, which communicates with an IRC "server" program running on a system anywhere on the Net. The servers handle the routing of messages from one client to another.

How does IRC work?

IRC works in the usual Internet manner of client-server. This is the same principle as that behind the operation of such things as Gopher and the World Wide Web.

The basic idea is that a program called an IRC Server runs on a machine somewhere on the Internet. This handles the routing of IRC connections and messages between any users attached to the machine and between it and all the other IRC servers across the Net.

Users who want to use IRC themselves run an IRC client program on their own computers (in our case this is Grapevine).

This software connects to the software running on the server, and acts as a front end to IRC, accepting the user's input and displaying messages that are relayed from the server to which the user is connected.

IRC client software

As usual with Amiga-related software, you can find IRC client software on Aminet. Use anonymous ftp to one of the following sites:

src.doc.ic.ac.uk
wuarchive.wustl.edu

The archive name that you require is:

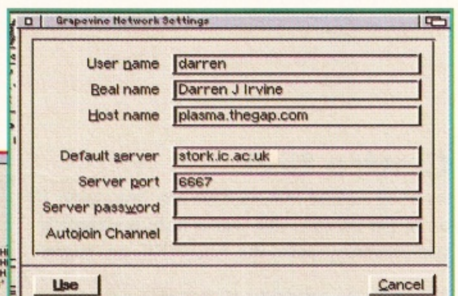
Grapevine/pub/aminet/comm/net/grapevine.lha

Setting your Amiga up for IRC

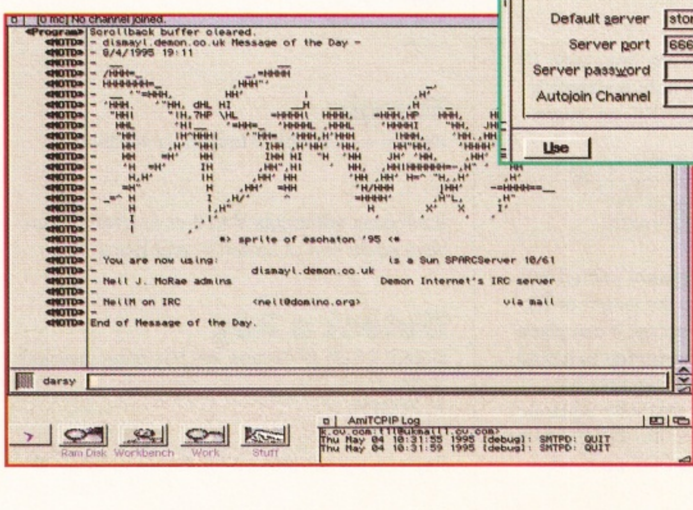
Option 1: You can use Telnet to connect to a publicly accessible IRC server – this is a machine that has client software running on it as well as the IRC server. Using this method of accessing IRC is simple, but it doesn't make the best use of your Amiga's resources.

Option 2: Another option to consider is a system called Irchat which runs as a client script on top of the GNUEmacs editor available from Aminet. To get this system up and running you'll need to spend a fair amount of time getting the Emacs system running first. To be honest, I wouldn't bother.

Option 3: The next and most sensible option is to use an IRC-specific client. There are a couple of these, but Grapevine has been around for the longest and is very stable.



Above: Before starting with Grapevine you need to fill in some of your user information.



Left: When first connecting to an IRC server you will see the 'message of the day'. This is Demon's.

Getting started

IRC is divided up into different areas called channels. Each channel name consists of a hash "#" and a alphanumeric name, usually (but not always) giving a clue to what sort of things are talked about in a particular channel. Note that Grapevine automatically puts in the "#" for you

The Undernet

The original IRC network (called EFnet) is overloaded, and so several alternative networks have been created. One of the most popular of these is called Undernet and rather sensibly, the servers all have the word "undernet" in their names. In general the format of an Undernet server address is:

eu.undernet.org	**for Europe**
us.undernet.org	**for USA**
ca.undernet.org	**for Canada**

When you connect to any of these, you will be assigned to the server in that domain which is least busy, and you can connect directly to a given server. These include:

oxford.uk.eu.undernet.org
amsterdam.nl.eu.undernet.org
davis.ca.us.undernet.org
washington.dc.us.undernet.org

If you're on the Undernet, you may be able to find me on #adb

Top 20 tips

In the last part of his AMOS tutorial **Steve Bye** *gives you 20 handy hints and tips...*

Welcome to the final part of our AMOS tutorial. As a going away present we have some valuable hints, tips and routines for beginners and experts alike. These tips were compiled with the help of my trusty tips book and my AMOSZine buddies.

NTSC

To find out how your program would run under the American NTSC system just enter this at the start of your listing:

```
Doke $DFF1DC,0
```

To return back to the PAL system use this:

```
Doke $DFF1DC,32
```

Use these dokes as a switch inside your program to make it virtually worldwide compatible.

Bits and bobs

When using bobs with a blank background, use the set bob command to push up the speed.

```
Set Bob N,1,PLANES,_MINTERMS
```

Which can be cut down to:

```
Set Bob N,1,,
```

For special FX try using a 32-colour screen with an 8-colour bob, i.e:

```
Set Bob N,1,%111,
```

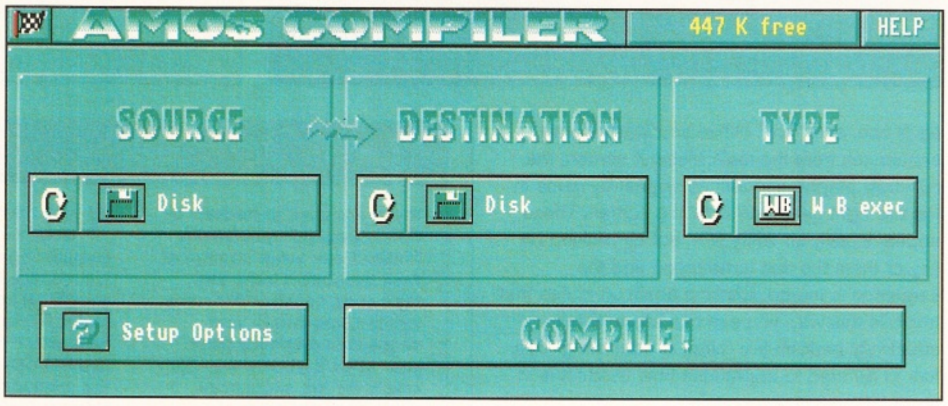
For more effects try different minterm modes (last parameter). (Table from page 133 of AMOS User Guide.)

```
    MINTERM MODES
REPLACE    : %11000000
INVERT     : %00110000
AND        : %10000000
OR         : %11100000
XOR        : %01100000
```

Saving time

This procedure shuts down various things that cause your program to waste valuable raster time and cause flicker. To use, simply call the procedure 'smooth' from your program like this:

```
SWITCH$="bsafp" : SMOOTH[SWITCH$]
```



The flags in the SWITCH$ variable correspond to the following:

b = Disable Bob Updates
s = Disable Sprite Updates
a = Disable AUTOBACK (Autoback 0)
f = Disable Multitasking (Remember to turn it back on before you exit your program etc, otherwise your keyboard will lock)
p = Permit Multitasking, for example:

```
SWITCH$="bf" : SMOOTH[SWITCH$] - will disable
bobs and multitasking
SWITCH$="p" : SMOOTH[SWITCH$] - will re-enable
multitasking
```

The flags can be in any order, i.e.: `SWITCH$="bf"` (to turn off bob updates and forbid multitasking) will do exactly the same as `SWITCH$="fb"`.

Here is the procedure:

```
Procedure SMOOTH[SWITCH$]
    For A=1 To 5
          If Upper$(Mid$(SWITCH$,A,1))="B"
                    Bob Update Off
          End If
    Next
    For A=1 To 5
          If Upper$(Mid$(SWITCH$,A,1))="S"
                    Sprite Update Off
          End If
    Next
    For A=1 To 5
          If Upper$(Mid$(SWITCH$,A,1))="A"
                    Autoback 0
           End If
    Next
    For A=1 To 5
          If Upper$(Mid$(SWITCH$,A,1))="F"
                     FORBID=Execall(-132)
          End If
    Next
    For A=1 To 5
          If Upper$(Mid$(SWITCH$,A,1))="P"

                    PERMIT=Execall(-138)
          End If
          Next
End Proc
```

AMOS Pro Compiler

Don't use the option to squash your compiled program via the Compiler. It often causes your compiled code to crash or show an 'Out Of Memory' error. Instead, use a cruncher such as PowerPacker or CrunchMania. These will crunch your program better anyway.

When compiling an AMOS program with an Icon Bank, the compiled program causes a guru on an A500 or A500+. However, it runs happily on an A1200. This seems to be the case no matter how large or small the Icon Bank is.

If using Data statements in your program, don't put any REM's on the end of data, because the Compiler can get confused and guru. If you get a 'Compilation Aborted at line nn' error message when compiling an AMOS source file then you probably have a syntax error in your code that hasn't been picked up by the editor. Try putting this in your code as an example:

```
F=Free()
```

The Interpreter won't see it as an error but the Compiler won't be able to compile the instruction because it is unknown. The line number given as the line aborted on is usually the line AFTER the line that contains the error.

Workbench requestors

Try out these commands:

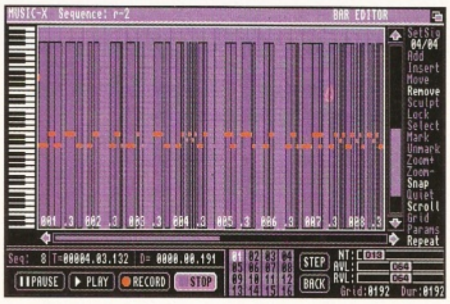
```
Request Off
Request Wb
```

This gets rid of those nasty AMOS requestors and replaces them with a Workbench requestor should the occasion arise. Make sure you have the Req.Library in your Libs Directory.

Please note that these requestors are not the Loading/Saving type, but just the message type, i.e. Disk in DF0: is Write Protected, etc.

Get on track

*Following on from John Kennedy's introduction to the Amiga's music making potential last month, **Darren Irvine** takes a closer look at sequencing on the Amiga.*



Music-X supports a unique multi-layered approach to sequencing, so you could combine this drum sequence...

To compose music on your Amiga all you need is the right software and the know-how. Over the next few months, John and I will be explaining just how easy it is to produce great sounds, and it won't cost you a bomb!

Trackers

There are two main categories of software for sequencing on the Amiga. The first is a class of program known as a tracker – examples include SoundTracker and OctaMED. These programs use the Amiga's built in sound sampling and playback capabilities to enable you to create sound modules (mods). Because the Amiga has the hardware to play back four samples at once, trackers can play back music on four separate channels. (However, with cunning programming you can interleave the sound samples to give the impression of eight channels.)

Using a tracker is a great way to get started with Amiga music making, because all the software you need is either PD or Shareware. Additionally, there is huge range of music mods available that you can use to learn some of the more complicated tracking features. One of the best ways to learn is to take someone's mod apart, piece by piece.

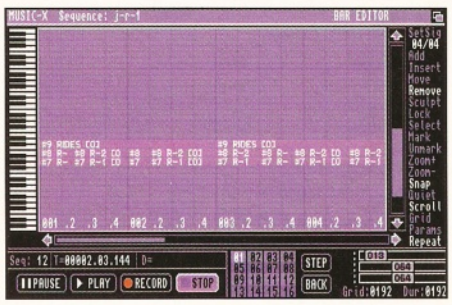
Some trackers also support limited MIDI functionality, allowing them to drive external sound modules, synthesisers or drum machines. MIDI support also allows you to link two Amigas together and synchronise trackers running on each machine; and if you are only going to link two Amigas you can get away with using a null modem cable instead of purchasing two MIDI interfaces.

> "Using a tracker is a great way to get **started** with Amiga music making."

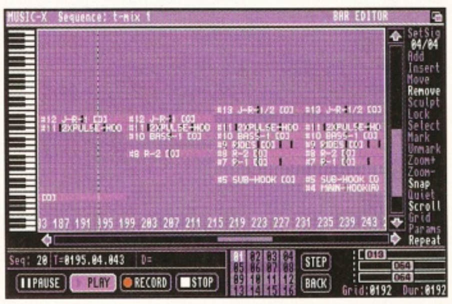
Sequencing

Although trackers are an excellent start, to get the most from your Amiga's music making you need an external sound module or synthesiser, and some sequencing software.

There are a number of sequencers available for the Amiga, but we prefer the features offered by Music-X 2.0. Other systems, such as Bars & Pipes, offer more control over extra hardware for multimedia applications. Nothing can touch Music-X, however (on any computer platform), for sheer usability. Not that Music-X is exactly user-friendly – it isn't, but when you get past the initial learning curve no other software seems to have the same "musician's" feel to it.



...with two more to form a Jungle-style drum loop...



...and then use the composite sequence in yet another sequence.

Using Music-X

Music-X has a unique approach to sequencing. The conventional approach is to let you create a bunch of sequences which you then edit into a song. However, Music-X makes no distinction between sequences and songs, and lets you embed sequences within sequences ad nauseum until you have a finished tune. There is also support for the Amiga's internal music hardware, so you can use Music-X to combine samples and external sound equipment directly.

Another area where Music-X comes into its own is in its ability to let you create a few sequences, stick some Repeat markers into

Filter effects

Filter sweeping is a very common effect in modern, dare I say, dance music. If you haven't heard the effect it's difficult to describe, but it is caused by playing similar notes whilst opening or closing a filter: which alters the cut-off frequency. Achieving this effect with an analogue synthesiser or an external sampler is easy: the hardware does it all by itself and you only need to twist a knob or send the correct MIDI control changes.

How can you achieve the same effect with a tracker? Amazingly you can do it, but don't think it has anything to do with the Amiga's built-in and largely useful hardware filter. The Amiga's filter has only two settings (on and off) and effects all four channels, which makes it useless for filter-sweeping.

Here's how to achieve the filter-sweep using the so-called "TH" effect. First, sample a single note which someone has kindly applied a sweep too. This is the hard part, but you will find suitable samples if you look hard enough. If the worst comes to the worst you could buy a sound-sample audio CD and sample a suitable sound yourself.

Now, using OctaMED's ability to delay the start of the note you can play little sections: the more you delay the sound, the more different the filter sound. With a little effort you will be able to achieve results very similar to expensive hardware.

HiSoft BASIC2

This month **Paul Overaa** *starts a new series that will explore HiSoft BASIC 2's Operating System support mechanisms and show how they can be used to best advantage.*

In order to write HiSoft BASIC 2 programs that use things such as the asl file requester, gadtool gadgets, devices and so on, it's necessary to make use of the appropriate Amiga library functions. We keep being asked about HiSoft's library interfacing arrangements so, over the next six issues, I will explain how they are used.

Our starting point is the Amiga libraries themselves. Library functions are generally useful routines which have been written and included as part of the Operating System software (either in ROM or as separately loadable disk files).

When a library is loaded into memory it gets placed in any convenient area available which means that, in many cases, the location of the routines change each time a library is used. In short, the concept of a given function existing at a fixed address (something that is still often found on less sophisticated computers) vanishes. Instead libraries have to be 'opened' and the system, having loaded the library from disk if necessary, provides a base address which enables the routines to be used. HiSoft BASIC takes care of all the nitty gritty details with its LIBRARY statement so, for example, to open the DOS library you would simply use code like:

```
LIBRARY OPEN "dos.library", DOS_VERSION
```

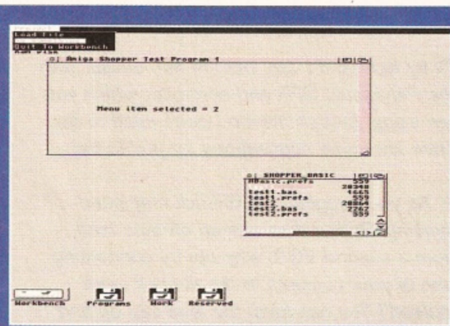
DOS_VERSION represents the version number of the library. To use particular library functions which are only available with more recent versions of a library you would need to specify an appropriate value here and if, when running the program, the specified minimum library version wasn't available the library opening procedure would fail. Libraries also need to be closed before a program terminates (otherwise the O/S would think the library was still in use). HiSoft BASIC does this automatically when a program ends but it's better to code this explicitly. For example:

```
LIBRARY CLOSE "dos.library"
```

Functions and subprograms

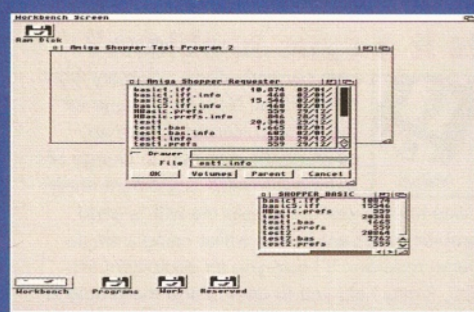
HiSoft BASIC, like most BASICs, distinguishes between routines which return information to the calling program, and those which do not. In the first case the routines are called 'functions' and the type of value returned is specified by including a suitable type identifier (%, &, $ and so on) at the end of the function name. Routines without return values are instead created as sub-programs and these do not have trailing return type specifiers in their names.

I've mentioned this now because before any Amiga run-time library functions can be used, they must be declared using DECLARE statements. HiSoft BASIC 2 has the appropriate declarations in the header files supplied with the language. The HiSoft support files come in two main varieties: those with the filename extension '.bc' contain predefined constants representing standard system values. Those with a '.bh' extension contain function declarations and a library declaration statement which causes the compiler to read the specified library's .bmap file (HiSoft BASIC needs access to these during compilation).



Above: The first Coverdisk example simply displays messages about the events it receives.

Below: The second Coverdisk example illustrates the use of the asl requester.



Jargon buster

Long word: 32-bit, i.e. 4-byte, value. BASIC long word variables and constants are designated by appending an & to the end of the name, e.g. 50&, some_value&.
Meta directive: Statements within a BASIC program that are commands intended for the compiler, as opposed to being statements that are converted to executable code.
OS: Operating System.
Pointer: A long word variable holding the address of another object in memory.

Some users have been confused because both function and sub-program declarations are present in the HiSoft '.bh' header files. Much of this confusion has stemmed from the fact that, because of their C language origins, all Amiga library routines tend to be called functions – irrespective of whether they have a return value or not. With HiSoft BASIC however an Amiga library function must only be declared as a function if it actually has a return value. Other routines need to be declared as sub-programs. The DOS library for example provides a time delay function called Delay() and this routine does NOT provide a return value. This being so the HiSoft dos.bh header file declares the routine as the sub-program:

```
DECLARE SUB Delay LIBRARY ' timeout&
```

The timeout& comment incidentally is simply a reminder that this routine expects a long word parameter representing a timeout (delay) value. For example, a time delay of one second, i.e. 50 ticks, could be created like this:

```
interval&=50 : CALL Delay(interval&)
```

In this call the variable interval&, which holds the delay value, has been defined as a long word variable because the declaration in the HiSoft dos.bh header tells us that the Delay() function expects this. You could alternatively of course specify the required delay directly in this fashion:

```
CALL Delay(50&)
```

Or better, define a long constant to represent the time out value. I've used this latter approach in the test1.bas example on our Coverdisk (see page 10) The program opens a window

Simultaneous equation solver

```
/* simultaneous equation solver */
say "how many x's are there in your first equation"
pull equx1

say "how many y's are there in your first equation"
pull equy1

say "what is the result of your first equation"
pull equr1

say "how many x's are there in your second equation"
pull equx2

say "how many y's are there in your second equation"
pull equy2

say "what is the result of your second equation"
pull equr2

equx3=equx1*equy2
equy3=equy1*equy2
equr3=equr1*equy2
equx4=equx2*equy1
equy4=equy2*equy2
equr4=equr2*equy3
say equx3"x +"equy3"y="equr3
say equx4"x +"equy4"y="equr4

if equr3>equr4 then do
equx5=equx3-equx4
equy5=equy3-equy4
equr5=equr3-equr4

if equr3<equr4 then do
equx5=equx4-equx3
equy5=equy4-equy3
equr5=equr4-equr3

x=equx5/equr5

/* substitute in 1 */
equx6=x*equr1
y=equr1-equx6/equy1

say "solutions x=" x " y=" y
```

Listing 1: James Gallagher's original program

```
/* modified simultaneous equation solver */

say "how many x's are there in your first equation"
pull equx1

say "how many y's are there in your first equation"
pull equy1

say "what is the result of your first equation"
pull equr1

say "how many x's are there in your second equation"
pull equx2

say "how many y's are there in your second equation"
pull equy2

say "what is the result of your second equation"
pull equr2

equx3=equx1*equy2
equy3=equy1*equy2
equr3=equr1*equy2
equx4=equx2*equy1
equy4=equy2*equy2
equr4=equr2*equy3

say equx3"x +"equy3"y="equr3
say equx4"x +"equy4"y="equr4

if equr3>equr4 then  /* DO END LOOPS ADDED */

do
    equx5=equx3-equx4
    equy5=equy3-equy4
    equr5=equr3-equr4

end if equr3<equr4 then

do              /* DO END LOOPS ADDED */
    equx5=equx4-equx3
    equy5=equy4-equy3
    equr5=equr4-equr3
    end

x=equr5/equx5 /* CHANGED */

/* substitute in 1 */

equx6=x*equx1 /* CHANGED */

y=equr1-equx6/equy1

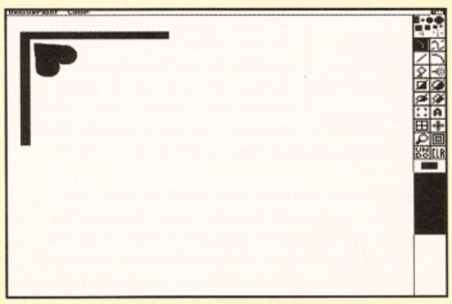
say "solutions x=" x " y=" y
```

Listing 2: Modified (working) version of listing 1

corner. When you've finished, you will have a copy of the corner attached to your pointer.

3. Press the "Z" key. In Deluxe Paint and Personal Paint this is the key to rotate a brush 90 degrees. When the brush has been rotated, stamp it down on the page next to the current corner by carefully matching them up as best you can and then clicking the left mouse button. Do this three times in all until you have a complete frame.

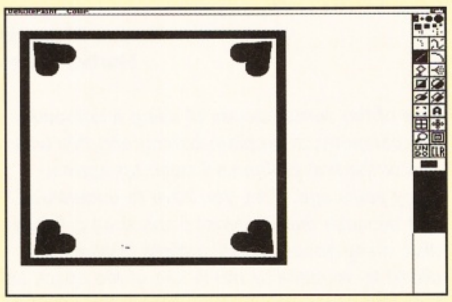
4. Finally, clean up the edges that don't match exactly. This is a common problem but it doesn't usually take much time to clean up the image.



Start off with a single corner in a paint package. This is a two-colour image. Cut the corner out using the Brush tool and then press the "Z" key on your keyboard to rotate it...

5. When you have finished, save the frame as a new picture and then import it into your WP or DTP package. Because it is a bitmap image, it needs to be scaled down to prevent any jaggies appearing when printed. Many programs import bitmaps with the picture scaled to 100 per cent. By making the image smaller, you are scaling it down. Just make sure you try and scale the image the same amount horizontally and vertically. It may be fine stretching bitmap images but remember it leads to a loss in printed quality.

6. If you need a really large frame, you can alter the page size in many paint programs to create a bigger "canvas". How big a page size you can create depends on the memory in your Amiga. Just remember that when working with two-colour images, a bigger image gives you more options for scaling it down on the page so you can get the best printed quality. Start with a picture that is too small and you will be limited in the size you can print it. **Larry**



... with each rotation of the corner, stamp the image down on the page to create a new corner until they all line up like this.

Simultaneous equations

Coding

After reading the ARexx feature in your July issue, I wrote a program to solve simultaneous equations. Unfortunately, due to problems with my A600 I have not yet been able to try the program. Please could tell me if the enclosed listing would work (see box above).

James Gallagher
Fife

Since your program is fairly short I've reproduced it in listing 1 (see box above). I didn't see Toby's ARexx feature but the technique is straightforward. You are collecting the coefficients of the two equations and then eliminating the y terms to solve for x and back substituting for y. You certainly have the right idea but there are a few slips present in the code. First, the sections where you create your fifth set of coefficients need to be

The problem you are having seems to lie in the way you are using text runaround. In each case where you have had to move the caption away from the picture, I notice the gap is the same. I am assuming that each picture has text runaround on. If that is the case, then no matter which way you layer the boxes, the picture will always force the text away from the image; and if the text frame is only small, the text will disappear because the space for it to go to in the box is limited. Move the box away from the image, outside the "Text Runaround" standoff area for example, and the caption reappears.

If you want text runaround on but also want the text in the main text frames to flow around an image, here is one way you could do it.

Place your picture over the text but make sure text runaround is off. Use the Polygon tool to draw a frame around the area where you want the text repelled from the picture and have text runaround on for this polygon box. An example would be to have a picture poking into a main text frame from the right of the page and only have a polygon with text runaround on, covering the left side of the picture that pokes into the main text frame.

Now place your caption up close to the image, making sure it sits to the right of the polygon which has text runaround applied to it. Because there is no box repelling the text on the right of the picture (no text runaround), the caption is not forced to disappear. You could even place the caption over the picture!

Remember that if you apply text runaround on a picture, any text, whether above or below the picture, will be forced away from the area of the page occupied by the image. This means in some instances you will need to look at workarounds like the one above.

I should also point out to PageStream users that if you send a caption behind another text frame, it may be that the text frame now on top is opaque and you need to make it transparent by choosing the fill "NONE" in the Fill panel for PageStream. **Larry**

3D and the Net

Do you know of any UseNet groups or World Wide Web/FTP sites which are concerned with LightWave or 3D programs in general? I already know about NewTek's FTP site, but (when it is on-line) it is usually busy and so quite hard/slow to access.

T. Savola
E-mail – tsavola@megabaud.fi

OK, here are some UseNet Newsgroups you could try:

- *alt.3d*
- *alt.3d.misc*
- *alt.3d.studio*
- *comp.graphics.apps.lightwave*
- *comp.graphics.packages.lightwave*
- *comp.graphics.rendering.misc*
- *comp.graphics.rendering.raytracing*

Probably the best way of finding out where there are any WWW or FTP sites with files to download is to join one of the LightWave (or other relevant) newsgroups and ask there, because sites are constantly appearing (and disappearing), so you would get the most up-to-date information this way.

There are also mailing lists for LightWave, Imagine and other 3D programs. These don't usually carry any files (unless someone posts them as uuencoded text), but again the folk on these lists are usually very helpful if approached in the right way (i.e. politely!). You can try subscribing to the Imagine list by sending a message saying SUBSCRIBE IMAGINE to listserv@sjuvm.stjohns.edu, but be prepared to wait a few days before you get any messages. I'm sorry I can't tell you the current address of the LightWave mailing list, since I'm no longer subscribed to it (too much bandwidth, not enough time), but I've included your E-mail address should anyone reading this care to enlighten you further.

You can also find quite a few 3D objects and textures on the Aminet FTP sites. For example, ftp to src.doc.ic.ac.uk. Log in as anonymous and enter your E-mail address at the password prompt. Then type cd aminet/gfx/3dobj, have a browse and download the object(s) of your choice. OK, it isn't quite as simple as I've made it seem, so you'll need to know a bit about ftp'ing, though I'm afraid this isn't the place to give you full Internet instruction. **Gary**

FAQ

Going round in circles

I'm having trouble making a model of an Earth globe spin correctly with either Imagine 3 or LightWave 3.5. When I set the rotation to be 360 degrees around the vertical axis the resulting animation jumps at the end of each cycle. What am I doing wrong?

There are two solutions. The first is to render one frame less than your required total – since the last frame will be a duplicate of the first (0 degrees is the same as 360 degrees). So if your rotation takes place over 90 frames only render the first 89 to use in your animation.

The second method is to calculate what the rotation angle per frame will be (e.g. 360/90 = 4). In other words, to do a full rotation over 90 frames the globe will rotate 4 degrees per frame, so you subtract 4 degrees from the full rotation (i.e. 360-4 = 356) to obtain the amount you must input for the rotation if you want a seamless animation, then render all 90 frames. Gary

DICE C problems

I am writing to ask why the commercial DICE C compiler for the Amiga has not received a review. The only recommendation is 'buy it' from Toby Simpson and the demo version on the Coverdisk many moons ago really didn't give a good idea of what the full package could or couldn't do.

It seems as though it didn't get a review because it wouldn't have got a very good mark. To be honest it is the biggest waste of £100 I have ever spent. It is extremely user-unfriendly, difficult to use, very buggy, and just seems a very unfinished and unprofessional product. I can program in C, quite proficiently as I am doing a course in it, but I still couldn't use it. If this is what we have to endure as Amiga owners then I for one am abandoning the Amiga.

It was also extremely disheartening to find that the Finder application program being developed by Toby Simpson kept crashing while it ran. The bug occurs when the Finder application has found lots of files that match the pattern – the requester fills up with names and shortly afterwards a software failure occurs. I don't know whether it was Toby's program or the compiler that has caused the problems but I would be grateful if he would look at it again!

Andrew Smith
Tamworth, Staffs

I have only recently started using DICE C, having previously been a confirmed SAS C user for many years. However, I am very surprised by your comments – the DICE version 3.1 that I am using is extremely good. In fact, the VMake utility, which automatically creates 'make files', and so enables you to compile and build multiple-module projects at the click of a single button, is brilliant.

I am incidentally using DICE C on a hard drive machine. Are you? If you are working from floppies all compiler environments are going to be more awkward (although not impossible) to use! Also you've not said what version of the commercial DICE package you are using. If it is an early version (and it may well be that earlier versions were a little more awkward to use than the current offering), you ought to upgrade. I doubt, however, whether the compiler 'guts' of earlier DICE versions were any more 'buggy' than any other compiler.

Again, I can only speak from my own experience, but the version of DICE C that I am now using seems to be a rock solid product. It

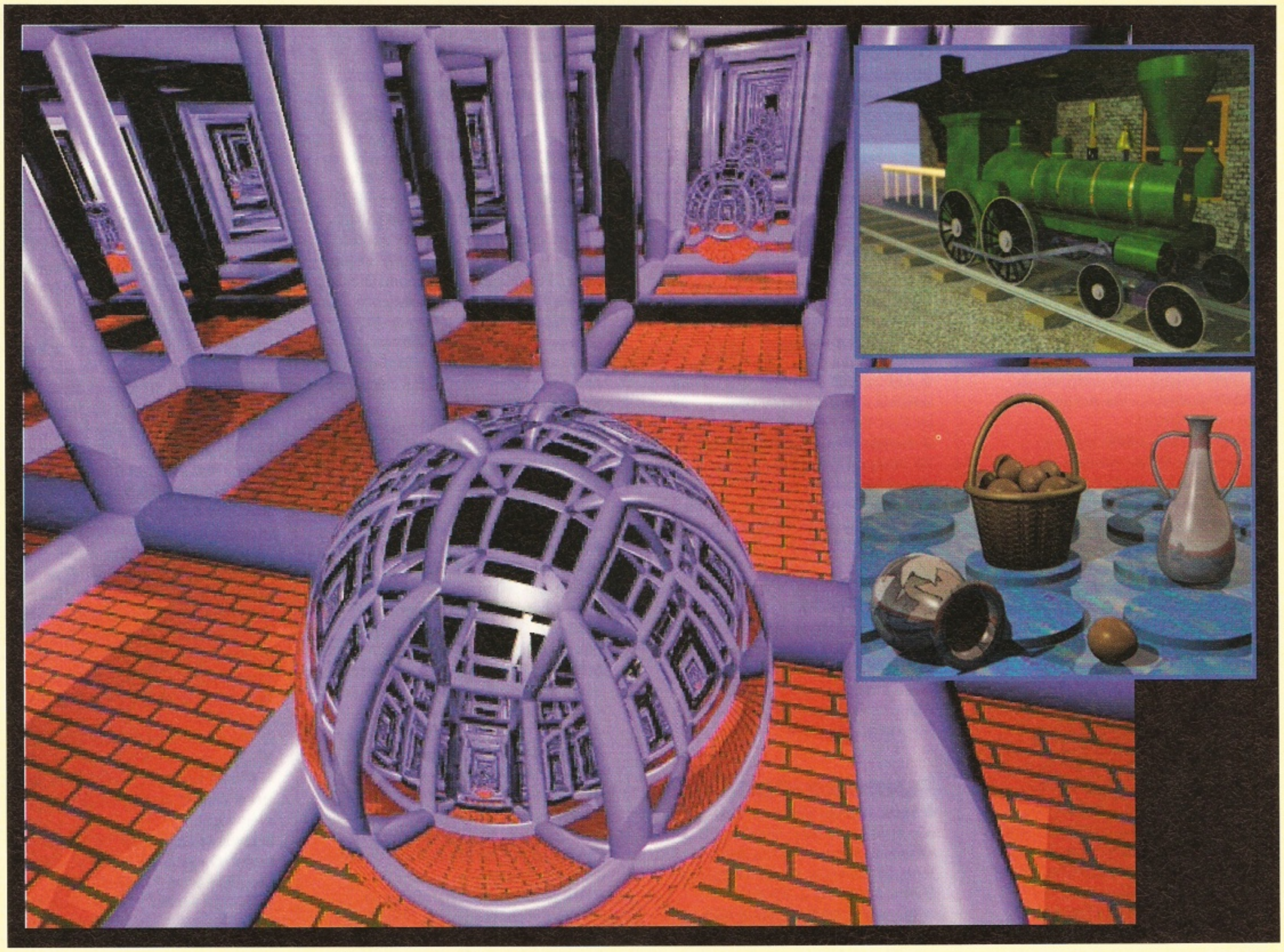
Bevel colour change

In the January 1996 issue of Amiga Shopper, in the Answers column, Gary provided Rafak Stachowizc with a way to change the colour of the bevels on a font object in Imagine. While the method described works just fine, there is an easier (and I believe undocumented... surprise, surprise) way to do this.

Create the font object in the Spline Editor and make it a normal Imagine object by selecting "Add Points". Save the resulting object and then load it into the Detail Editor. Select the object (or group) and then enter "Pick Faces" mode. Then... choose "Pick Subgroup" from the Pick/ Select menu. A requester will appear listing all of the various parts of the font object. Click on the one you want to select (in this case the bevels) and those faces will be highlighted. Bring up the "Attributes" requester and choose the colour, filter, and reflect values you wish the bevels to have. That's all there is to it.

Just one more instance of the power of Imagine that goes unused because of the incomplete documentation.

Steve Langguth (slanggut@mail.orion.org)
Springfield, Missouri USA



This picture is called Tricks With Mirrors and we all liked its originality. It was rendered in Imagine by G. Hoyles; you can find the train object pictured top right on this month's Coverdisks along with other objects he kindly submitted. Remember, even if your picture doesn't win here, we may still use your efforts elsewhere in Amiga Shopper. If you want to win £25, send your picture as a JPEG to: **David Taylor, Amiga Shopper, Future Publishing, 30 Monmouth St, Bath BA1 2BW.**

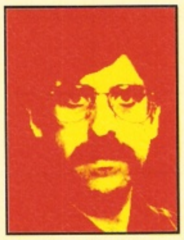


We have received several letters from readers who having problems with IntOS, since we included the program on our Coverdisks (AS57). So we have recruited AMOS expert Steve Bye from F1 Licenceware to answer your queries.

The rest of our panel have been busy solving your problems too. We have included a couple of frequently asked questions to help out as many readers as we can! Read on and get your problems solved.



Paul Overaa is our Operating Systems programming expert. He has written several books, including: Mastering Amiga Assembler, Mastering Amiga ARexx and Mastering Amiga C. His main interest is in program design and he is heavily into the music side of the Amiga. Paul's other interests include red wine, maths and wind-surfing!



Gary Whiteley is our expert on video and graphics. He regularly produces work for films and TV. Gary has also written several books on his favourite subjects – amongst them is Amiga Desktop Video, published by Future Publishing (call ☎ 01225 822511 to order a copy). Gary also regularly reviews new products for Amiga Shopper.



John Kennedy is our hardware and music expert. John has written Supertests and features alike for Amiga Shopper in the past, including the CD-ROM Supertest in issue 49 and our monitor Supertest in issue 55. He has written the feature on games creation software over on page 24 and he is co-writing our music tutorial with Darren Irvine (see page 58).



Larry Hickmott is our DTP and word processing expert. He produces his own DTP magazine called Em and has written several books, including The Wordworth Companion for Digita and Future Publishing's books division. This month Larry answers your queries in Amiga Answers and has also written the instructions for our Turboprint Coverdisk.

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Counting House

This new program from ARK is impressive, but does Counting House means business? **Larry Hickmott** *finds out...*

A computer is only as good as the software provided for it. Although the Amiga has plenty of serious applications, there are few high end business packages. These few include the accounts program Easy Ledgers, the spreadsheet Final Calc and the database Twist.

There is a gap in between these packages for an integrated high end business manager program; this is where Counting House from ARK fits in. Richard Howe from ARK told me that the program was originally developed for their own business around 10 years ago and has been released for the Amiga in the hope that it will help the machine win back some of the business users it has lost to the PC.

I hate to admit it, but I use a PC for doing my business accounts. I do so because I need a machine that is free at any time to take orders; my Amigas are always busy doing other important tasks. However, there is another reason and that is that I haven't seen anything on the Amiga yet that can match a program like Quickbooks on the PC for simplicity and power. Quickbooks is one of the hottest accounts programs on the PC.

Counting by numbers

Which leads me to Counting House from Applied Research Kernel, or ARK as they have become known over the many years they have supported all things Amiga. I eagerly started to install Counting House on to my Amiga to see how well it looked after the Amiga owner with a business. The list of functions is impressive. These include handling double-entry accounts, address labels, mail merge, tax analysis, cash order processing and a lot more besides.

I was also interested in ease of use because one of the trends we see on the PC is that accounts software is getting simpler to use. Gone are the bad old days when you needed a degree in business studies just to use an accounts program. The market has shown it wants simple to use programs that are suitable for managing business accounts.

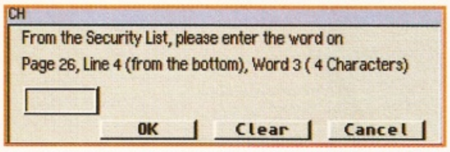
The first thing that struck me about Counting House is that it looks different to all the others on my system. This is because it has been written using the Superbase database programming language which allows those with Superbase 4 Professional to expand on it even further. It has also restricted what the author can do with the program, as we shall see later.

Getting up and running is time consuming because of the numerous security checks you have to go through. The first of these checks asks you to look up key words in the 'manual',

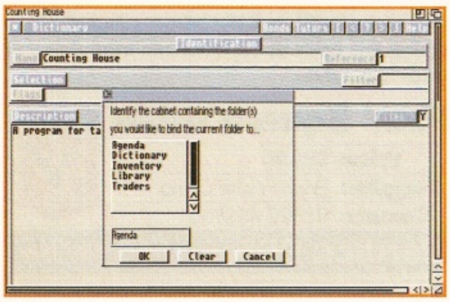
Two into one will go

There are two versions of Counting House. One is the Cash and Credit version reviewed here and the other is a Cash only version selling for £59.95.

As the name implies, the credit facilities are missing from the Cash version, although there is still a lot to use, making it good value. The features not included are auto direct debits, credit account balances and histories, credit purchase order processing, invoices, credits and payments, credit sale order and receipts and statements.

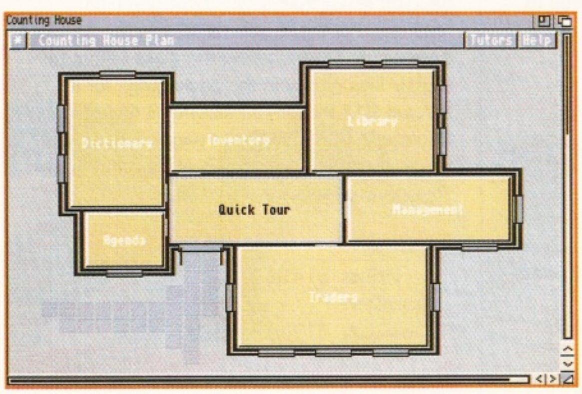


Getting into Windsor Castle is easier than finding your way into this house! This is just one of the security checks you go through.

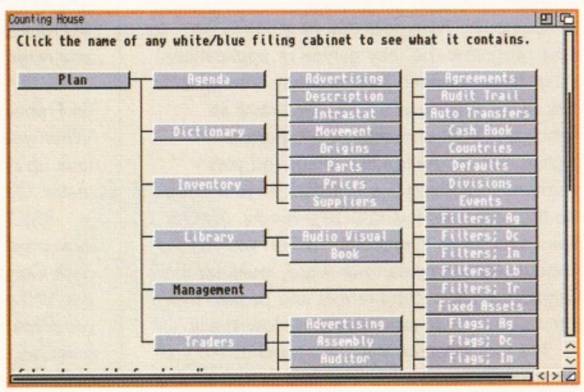


When binding folders together, Counting House helps out by walking you through the process. If only the other parts of the program were as helpful as this.

"I haven't seen anything on the Amiga that can match Quickbooks."



***Left:** The starting point for a day at the office is this house and its seven rooms, which represent the different parts of Counting House.*



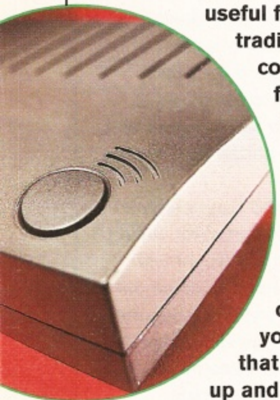
***Right:** Counting House may be powerful but it is also intimidating to look at. This tree describing the functions of the program is enough to have many people running for cover.*

Mr. Modem

David Taylor *meets the new modem that comes with a whole suite of software to give you access to BBSs and Internet.*



The Internet, becoming synonymous with the World Wide Web, is being hailed as the next big thing. Growing every day and becoming more useful, the time when every computer owner will want to own a modem is approaching. Why? Well, with search engines on the Net, you can find in seconds information that you would never find any other way. It tends to be useful for obscure stuff that no traditional sources would cover – bottle collecting for instance! Then there is the instant access to Shareware software, through both BBSs and places like the Aminet online archive. E-mail is becoming one of the easiest ways of communicating, enabling you to leave messages that you know will be picked up and which will probably get you the quickest response possible.



All of these things and more besides are available through a modem. The problem for the Amiga has been (and still is) the relatively poor support it has for software to access the most popular and visual part of the Internet, the WWW. All the software is Shareware and under constant revision, but it is still not as stable as the Amiga needs. Will Amiga Technologies change this with its new bundle? That remains to be seen.

Until then, bundles like this one offer the best and most cost efficient means of connecting your Amiga to the Net. The modem is a compact unit and attaching it to the Amiga is simple. You plug it into the serial port, put the line to the phone (it comes with a splitter for the phone so you can have both plugged in at the same time) and plug the power in. The modem itself is a V34 28,800, so it's a decent spec.

> "This pack covers **every** aspect of Comms."

Installing software

With the hardware set up, you then have an 18-disk set full of modem software. Installing software for the Web is a bit of an ordeal, but there you go. First, you need to install MUI, if you haven't got it already, then AmiTCP and then, finally, AMosiac which gives the interface to the Web.

The rest of the disks contain assorted software to enable you to take advantage of the other aspects of modem usage – yes there is life after the Web. The disks include JRComm which gives you access to the mundane things like BBSs and E-mail – it's a general purpose Comms package. There is also AmigaFax which allows you to send faxes through the 14,400 Group 3 fax side of the modem. (If you want to use your modem to double as a fax then you might end up forking out for the commercial GPFax package.) This pack covers every aspect of Comms, supplying a range of programs to get you started. You may find different packages that you prefer later, but you can do anything with the programs supplied here. Don't forget that many of them are Shareware packages that you should register, which will add a bit more to the overall cost.

Online PD have put a great bundle together; they even offer a free 10Mb of downloads from their BBS to get you started. Plus, the software pack is available separately for £12.75. ■

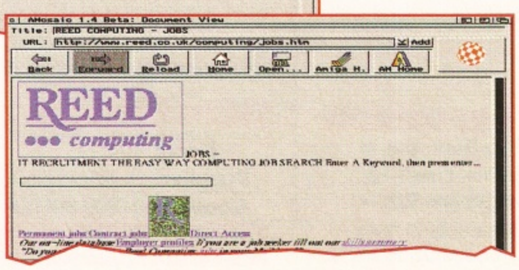
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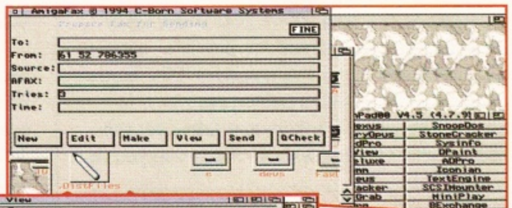
Verdict: 90% — Star buy



Left: *The best Amiga mag is, of course, well represented on our very own FutureNet site.*



Right: *The WWW is getting more useful all the time – you can even find a job over the Internet.*



Right: *The modem can also double as a fax machine, but you may want to use different software.*



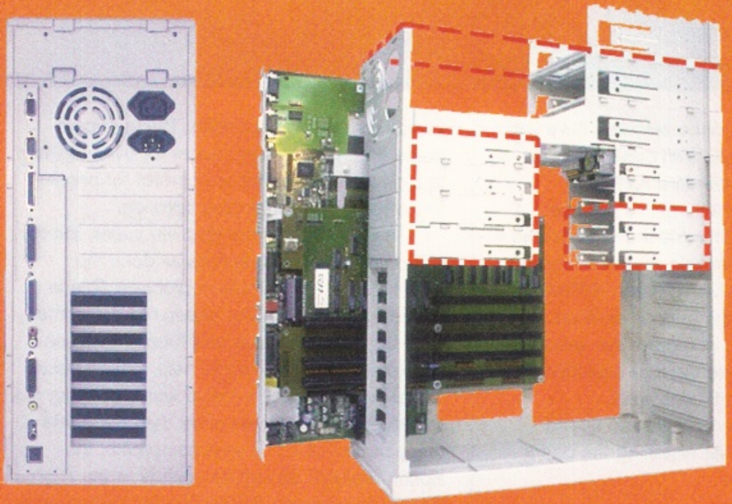
Left: *Going shopping without even leaving your Amiga. Is there anything it can't do?*

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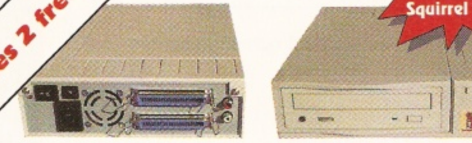
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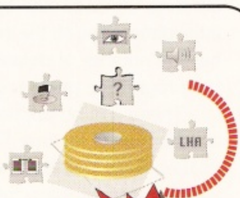


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Final Writer 4 Lite

This cut-down version of Final Writer 4 gives users with Amigas but no hard drive or extra memory the chance to use Softwood's excellent WP program. **Larry Hickmott** *finds out how.*

One of the drawbacks in using a standard Amiga is that many high end programs won't run on it. Programs like Final Writer 4 and Wordworth 5 to name but two. To combat this, Digita International brought out a special SE edition of its word processor Wordworth and now Softwood have done something similar with the release of Final Writer 4 Lite.

Final Writer 4 Lite is a cut-down version of the full Final Writer 4 program. By trimming a few features, Softwood have produced a package that will now run on Amigas without a hard drive or any extra memory. This move by Softwood is significant in two ways.

First and foremost, it enables people who until now have been using Final Copy II upgrade to a version of Final Writer for only £18.95. Final Writer 4 Lite also enables those people who don't necessarily need all the features in the full package to get a first class program for next to nothing. Not only is there an even lighter version of Final Writer 4 Lite on the March Amiga Format Coverdisk, but the upgrade from this Coverdisk is less than 20 quid, a saving of almost £20 on the full price.

One thing is for sure, Final Writer 4 Lite is very affordable.

What a looker

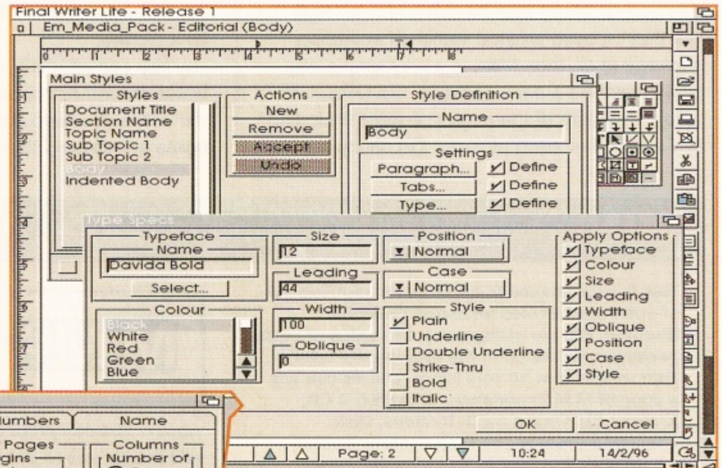
Final Writer 4 Lite doesn't look any different to the current, full version of Final Writer. All the touches added to version 4 like Click Tabs and the Information Bar at the bottom of the screen, are present. Behind the facade though, there are some changes to be found.

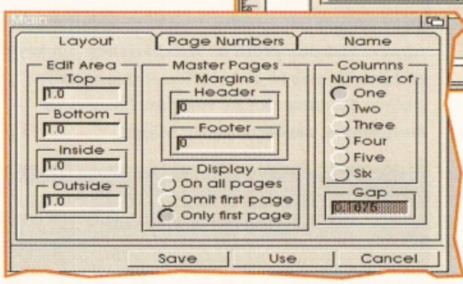
Running through the menus, you won't see any reference to ARexx because this has been removed from the program. Not having ARexx means you will be prevented from using many of the Public Domain utilities out there, like Final Wrapper (a text effects simulator). The other notable absentee from this light version is the grammar checker, leaving you with just a spell checker and thesaurus to look after your words.

A partial change with Final Writer 4 Lite is the removal of section types. This means that you can still have different sections within the one document but the section types for creating endnotes, indexed items and so on are missing.



Above: ***Text requiring bullets at the start of each point is formatted with the click of a single button.***





Above: ***The number of different attributes you can apply to your text is bewildering compared to those in Final Copy II.***
Left: ***Many of the features in Final Writer 4 Lite are to be found in multi-functional panels like this.***

Jargon buster

Style: A set of attributes that can be applied to a piece of text in the one operation. These attributes include the font to be used, its size, colour and justification. By using a named Style, you can make sure that pieces of text that are to share the same attributes do so without you having to remember what all those attributes are.

EPS graphic: A type of graphic that can be sized and stretched without altering the printed quality of the image. Very popular on other computers, EPS graphics can't be imported into the Lite version of Final Writer 4 but can be used on the page in the full version.

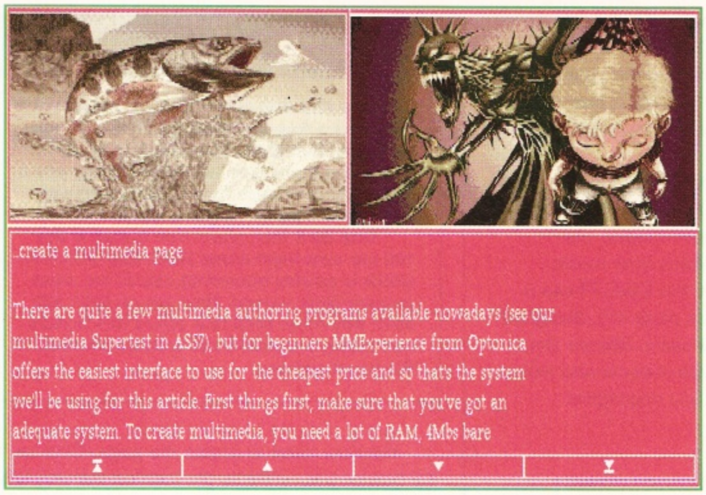
Multiple sections: A function which enables you to create different sections or "chapters" within the one document. You can for example, have a cover page, a main section and then a back cover. Each of these different sections has to be created individually in Final Writer 4 Lite because the different section types available in the full version have been removed.

Nimbus Q: A font format unique to Final Writer and Final Copy II. Nimbus Q has many advantages in that it can be printed to PostScript and non-PostScript printers alike, renders quickly on-screen and prints beautifully.

Text Effects: A function in Wordworth and one simulated in the full version of Final Writer using Final Wrapper, to create text in the shape of a spiral, circle and other amazing shapes.

The upshot of this is that the most used essential functions are still present in the program. These include Master pages, Main Sections, Styles, Easy Headers and Footers and Drag and Drop for moving blocks of text. Missing (as are they from the full version of Final Writer) are tables, TextEffects, Footnotes, RTF file format support and a way of importing pictures into frames.

This last point is particularly annoying if you work with lots of images on your page, as I usually do. What I find happens is that when an image is imported, it takes up the whole of a page (depending on the resolution of the image) and needs to be resized to fit a specific space on the page. On an un-accelerated Amiga working with photographic type images, this process can take many



Pages designed within M.M.Experience have a very recognisable feel to them and are very easy to set up.



However, you can design your own pages within paint packages, then turn them into multimedia pages by adding invisible boxes in M.M.Experience.

needs to be ASCII, will be put directly into the box. If you haven't already got the text, then you can write in it from within the program. Simply enter the name of the text file you want to create, or that you want to use, and accept it. You will then be asked to choose what font you want to use. There are a couple of standard ones, but you can add a font for use in the project by clicking on the "Add New" icon. (If you want to see one, then you can from within the program.)

The text can be justified in several ways from the icons on the top right of the font requester. Animations, in IFF anim format, will have their first frame displayed.

When you have your boxes set up on the screen, you need to assign media clips to them. This means setting what will happen when you click on the box. For instance, you may want to display a picture full screen or play back an animation.

To do this, select a box by clicking in it, then click on the icon next to the box creation icon in the main bar. Now you can decide what you are going to do. Click on "Add" with the left button and the bar above will now say "Empty". If you click there with the right mouse button, a menu appears showing what can be attached to the box. If you select one, say ILBM (picture), a requester appears asking you to select the file to use. Now, when that box is clicked on in the presentation, it displays the picture. One of the selections for attaching to a box is another page, which is how you set the presentation to move through pages.

Music maestro

You may want to add a further touch of playing a sample when the box is clicked on. Underneath the bar you have just used, you will find a set of four crosses. If you click the right button on the first of these, you'll get another menu which enables you to select another file to be used when the box is selected. The top

Is there no other way?

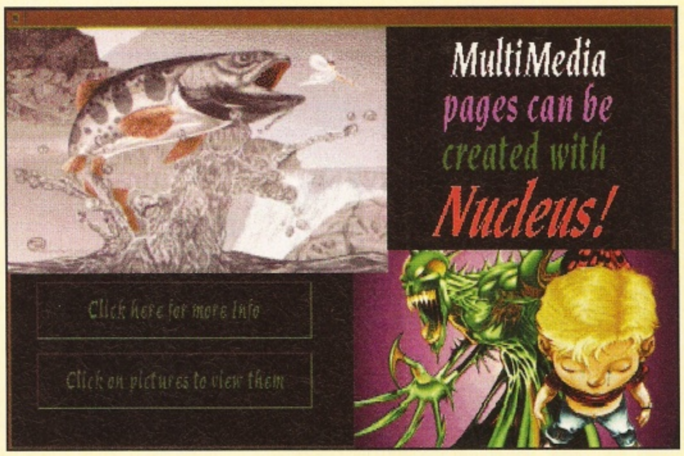
Of course, M.M.Experience is not the only multimedia program around. It is about the cheapest way of producing these sorts of projects and very easy to use, but there are several even cheaper options for those who think that these projects sound a little grandiose for their needs.

Nucleus, the Licenceware program which was demoed on AS60's Coverdisks, can be used through a GUI to create executables that can be linked together like multimedia pages. Because pictures can be loaded in and saved as executables, you'll find that the only additional programs you'll need are a sample and module player.

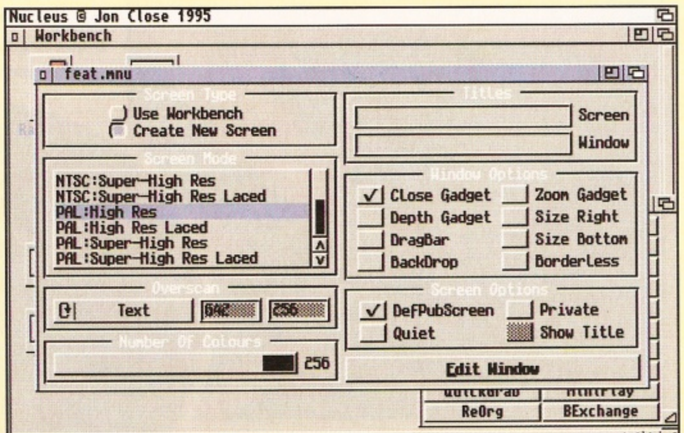
Then you can add boxes which will either go to separate Nucleus screens (don't forget to set the current screen to quit when you do that, to save on memory), or play modules using the external players. You'll find that the executables that are saved out are quite large, but if you use a file packer that saves out executable files, such as PowerPacker or the even better StoneCracker, you will get them down to a reasonable size.

Or you can try out the programs that are designed to create floppy disk-based multimedia, like diskmags. There's Disk Magazine Creator from F1 Licenceware (☎ 01392 493580), which costs £6.99 and was demoed on our Subscribers' disk AS57.

There's also DiskSystem 3 from 5D Licenceware, ☎ 01709 888127, which is an excellent program that only costs £2.95. You can try out it for yourself this month, because you'll find a fully usable demo in the Licenceware section on our Coverdisks (turn to page 10 for more info).

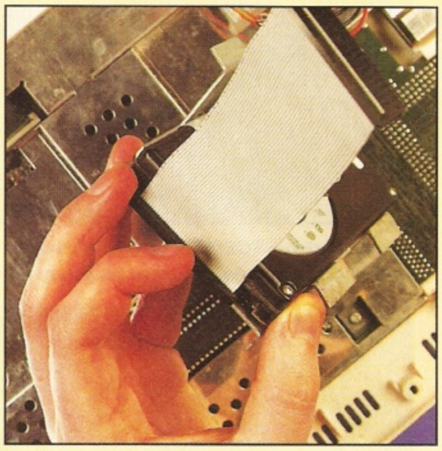


Nucleus can easily be used to create multimedia pages from the interactive executable files that it outputs.



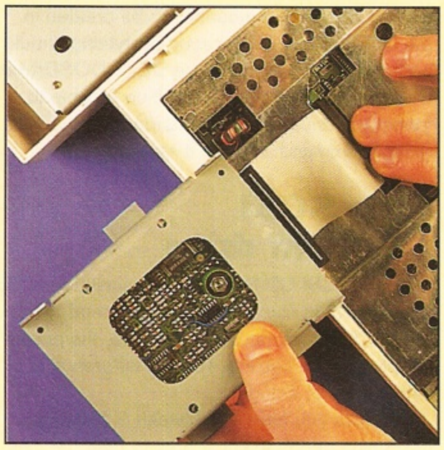
Nucleus uses any screenmodes and they can be defined so that they can be used as windows or separate screens.

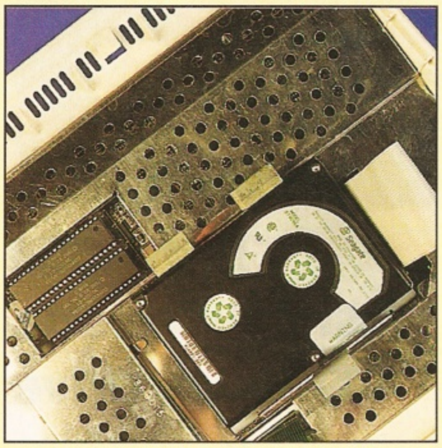
...fit a 2.5-inch hard drive



Step 1: *Unscrew the Amiga's casing and lift the keyboard. Slot the drive into the disk cradle and attach the ribbon as shown.*

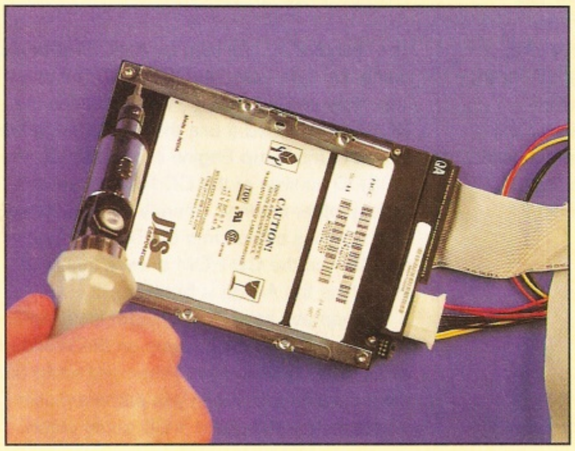
Step 2: *Attach the cable to the IDE interface in the A1200. It should fit exactly.*



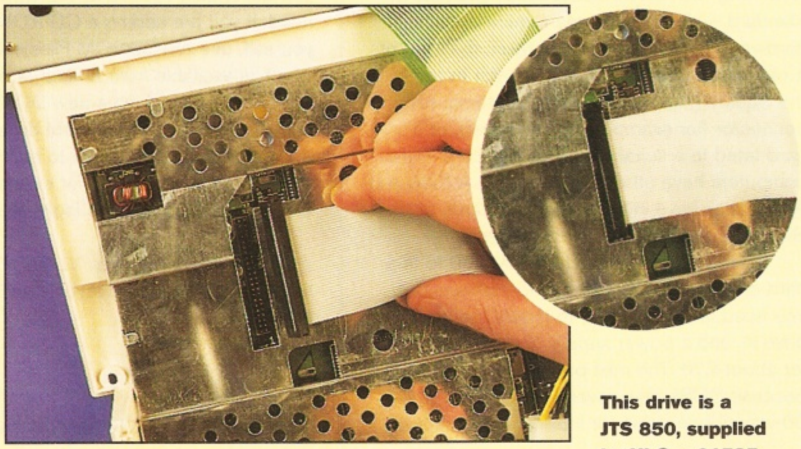


Step 3: *Drop the cradle back into its slots; you can now replace the keyboard and screw the casing back on. Reconnect the power.*

...fit a 3.5-inch hard drive

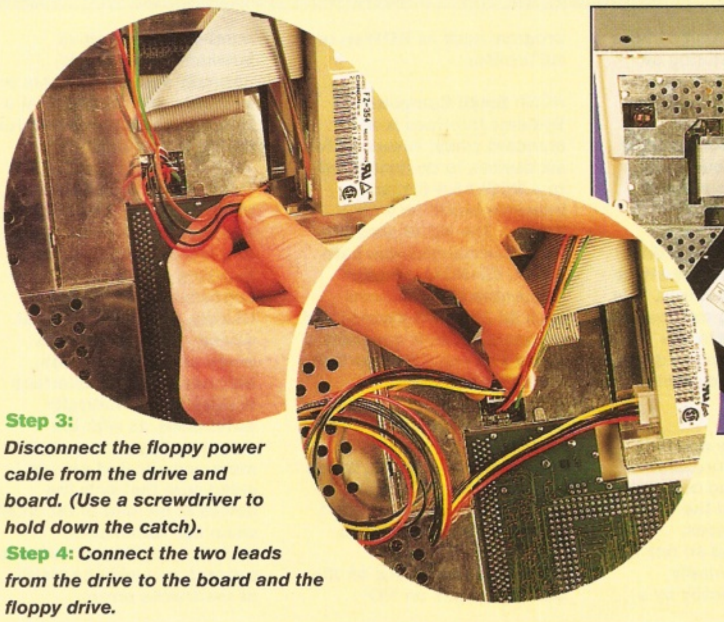


Step 1: *Remove the top leg from the drive using a torque screwdriver and unscrew the Amiga's casing.*



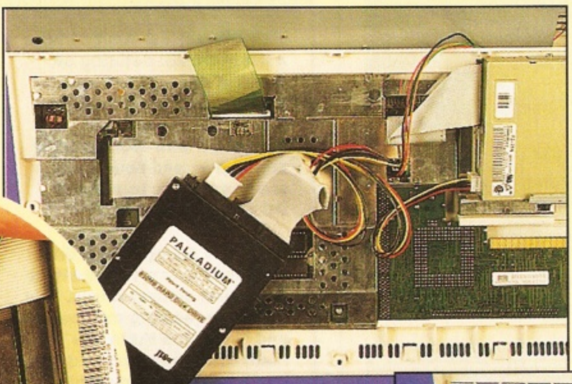
Step 2: *Fit the ribbon to the IDE interface so that the ribbon is as close to the top of the Amiga as possible (top-right).*

This drive is a JTS 850, supplied by Hi-Q ☎ 01525 211327, and is the only 3.5-inch hard drive that does not require case modifications.

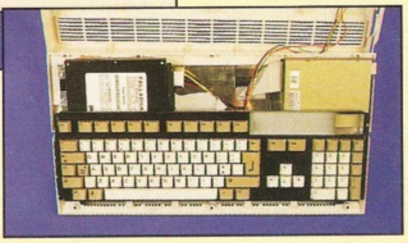


Step 3: *Disconnect the floppy power cable from the drive and board. (Use a screwdriver to hold down the catch).*

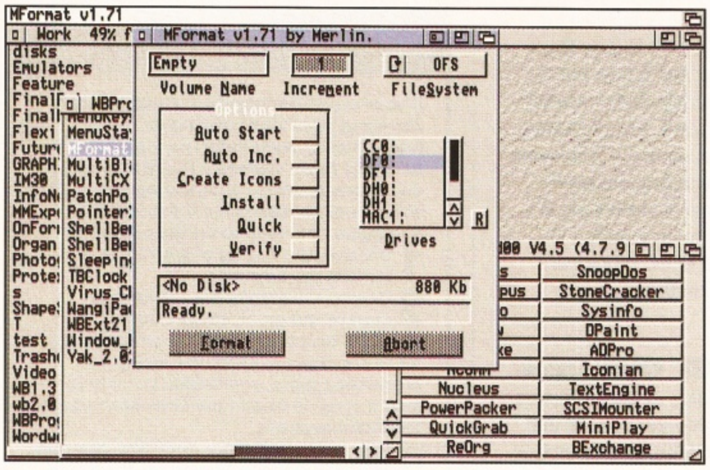
Step 4: *Connect the two leads from the drive to the board and the floppy drive.*



Step 5: *All the leads and cables should be connected. Lift the drive up and slot the keyboard over the drive's cables.*



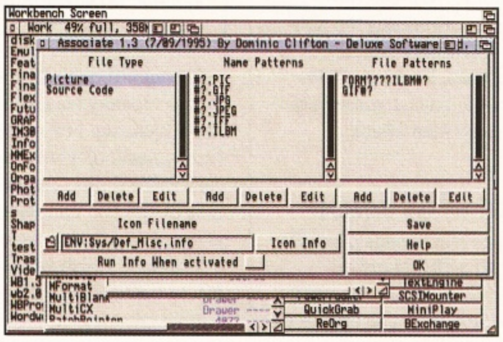
Step 6: *The drive should fit snugly, and you can now replace the lid and re-attach the power.*



Replacing the original format command with MFormat suddenly offers a much more useful set of options.

program you need is one that can expand the idea of the WBStartUp drawer, because when you have programs that automatically start every time you boot, it's best if you have a way of stopping them should you want to for, say, memory reasons. One program that does this very well and is incredibly easy to use is AutoStart (AS56 disk).

This program is installed into the WBStartup drawer and a preferences program in your Prefs drawer. When you launch the prefs part, you can just drop program icons on to the screen that you want to be loaded at StartUp and they will be added to the list. The programs can be stored anywhere except in the WBStartUp drawer. The preferences allow you to set whether the program is to be launched from the CLI or Workbench and also whether you want it to be launched automatically or requested, or even if you want to set it so that you can use it normally, but stop it being used if you boot up when holding the left mouse button. This is much easier than having to move programs in and out of the WBStartup drawer all the time.



Associate adds a feature that enables you to automatically add new icons to files.

There are then two types of programs that you can add to Workbench. Those that enhance existing features or build on them and those that add entirely new ideas.

Feature enhancing

In the first group are programs like AssignZ (AS53 Subs disk), which intercepts and requests volumes and allows you to assign them with the mouse as opposed to having to mess around opening Shells. Then there are two programs from Nick Christie, ShellBench (AS60 disk) and ExtraInfo (AS55 Subs disk).

ShellBench makes drastic changes to the Execute command on Workbench allowing you to drop icons on to the interface instead of typing in full paths and adding many other badly needed features. ExtraInfo radically upgrades the Workbench Info command and can even be patched to be called instead of the original. The interface is much more in depth and has more features, yet remains intuitive to use.

Another two Workbench programs that have been updated by PD authors are the Exchange commodity and the format option. BExchange (AS61 Subs disk) offers a better GUI with more options, such as the ability to remove all commodities instantly.

MFormat (AS52 Subs disk) can be used to replace the format command and adds a much better interface with better options, like the ability to install disks as you format them, and the ability to set it to format batches of disks. Remember, if you do use programs like these to update Workbench, always keep a backup copy of the original program, just in case you need to swap back to it.

I also use MenuKeys (AS57), a program that enables you to jump to and select from the menus through the keyboard, so that if you are typing in, you don't need to move to your mouse every five seconds.

Lastly, one tiny program that I think is excellent is WBExtender (AS58 disk), which expands your title bar adding more information, it also patches the About requester to enable you to flush unused libraries from RAM or order a reboot.

The other group adding new features are simply general utilities. Most important is Virus Checker. The latest version 8.3 (AS59 disk) has a splendid interface and sits in the background scanning disk for problems. Hopefully, you should never need to know it's running.

Easy accessing

Another program worth having is one that allows you access to programs without having to manually move through directories to get to them, in other words a program launcher. I use LaunchPad (AF81 disk), but other programs, such as WangiPad (AS54 Subs disk) and ToolsDaemon are also very good.

Associate adds an AppIcon to Workbench on which you can drop files without an icon. It will then try to match the file type with its record and add an appropriate icon. Another similar program is IconChief (AS59 Subs disk), which will try and display files without icons using more useful pictures than the standard hammer.

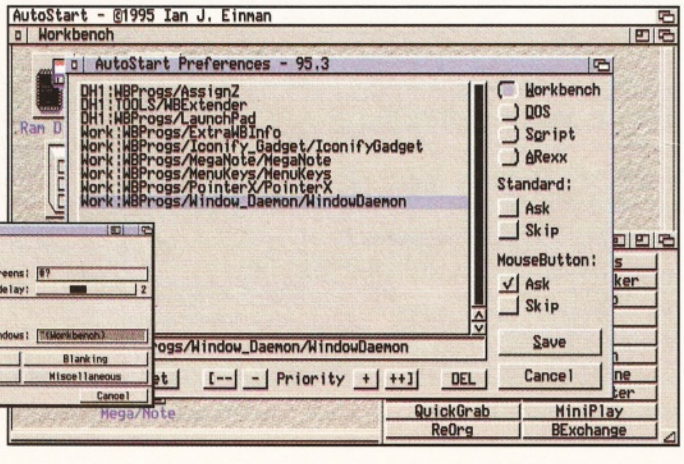
Window Daemon (AS52 disk) pops up if you click your right button on the screen cycling gadget at the top right of the screen. From here you can jump directly to a screen or even a specific window on a screen.

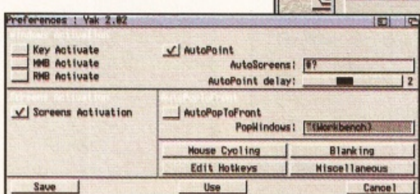
Two other programs that are useful to have hanging about on Workbench are Icon Calender (AS53 disk), which adds a little calender, and MegaNote (AS52 disk) which adds an auto-saving Post-It! note that you can scribble in.

Lastly, with all these new programs on Workbench, some of which will be visible most of the time and with your new super-large screen, you can use the virtual screen manager AAVD (AS52 disk), which gives you a replication of Workbench within a re-sizable window. You can then move windows around Workbench or jump to specific points from within that window.

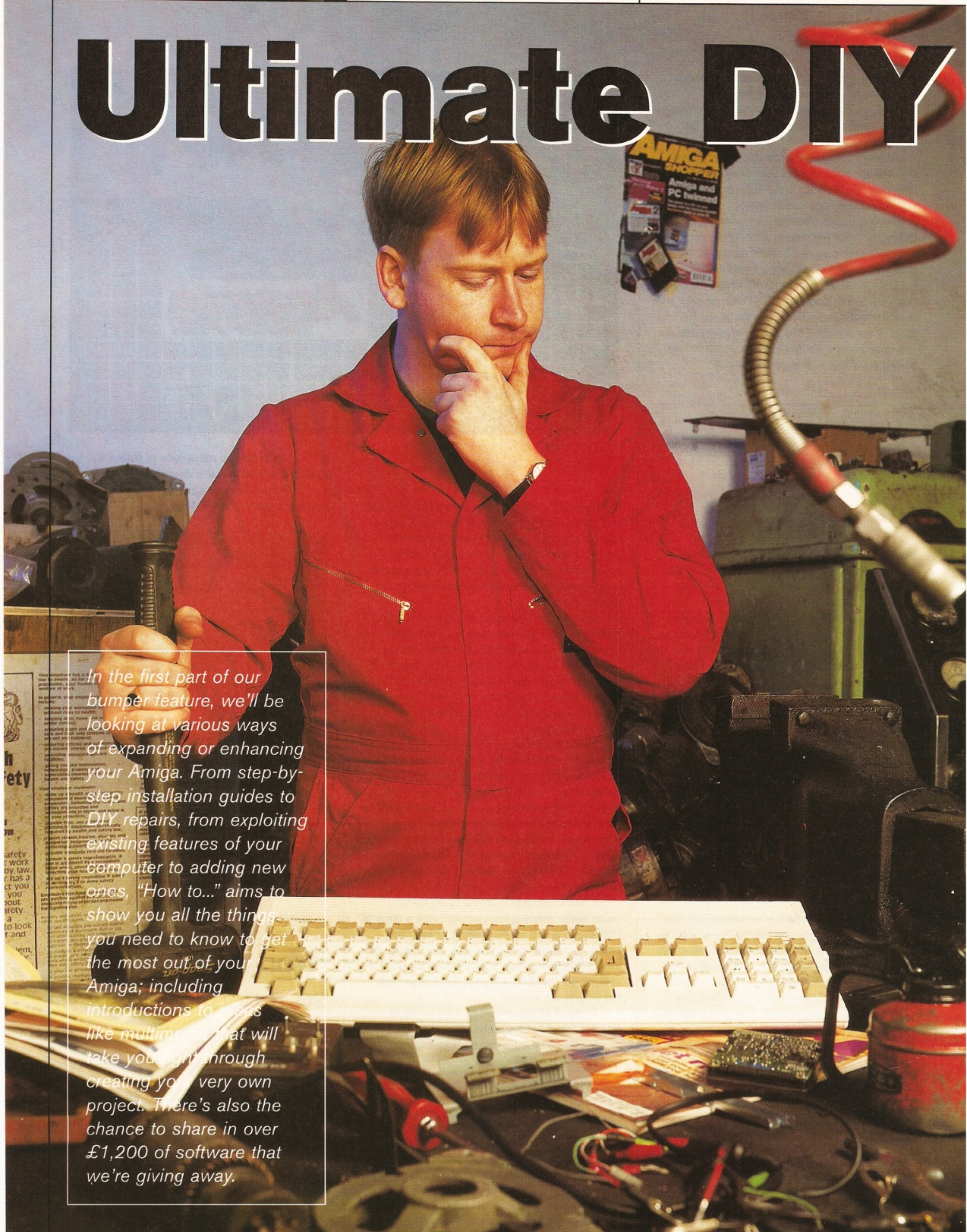
Using all or some of these programs can really make a difference to your Amiga. Most of the programs have been included on our disks in the past, so the chances are that you already have them, but might not have considered using them. If you haven't got these disks, then any PD library should be able to help you; some will even let you specify the disk's contents so that you can get just the programs you want. See page 47 for a review of the new Workbench Add-On CD from GTI.

AutoStart (right) expands the idea of WBStartup, while programs like Yak (below) add multiple features in one program.

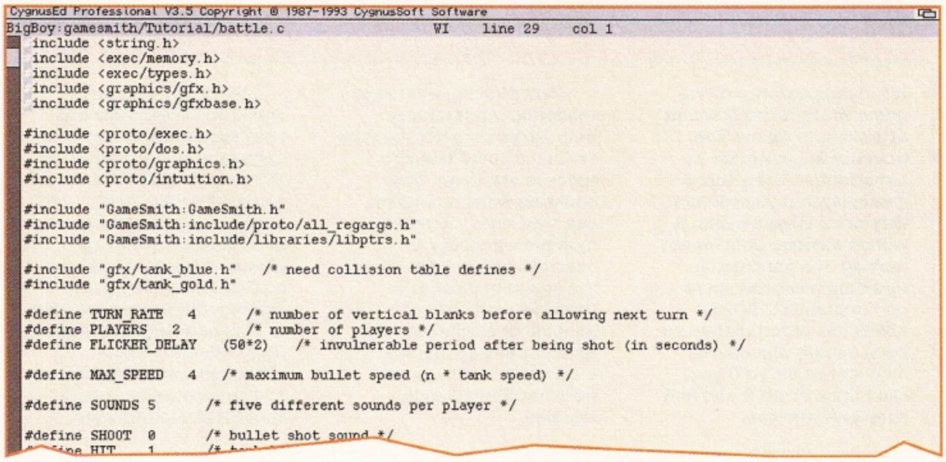




Ultimate DIY



In the first part of our bumper feature, we'll be looking at various ways of expanding or enhancing your Amiga. From step-by-step installation guides to DIY repairs, from exploiting existing features of your computer to adding new ones, "How to..." aims to show you all the things you need to know to get the most out of your Amiga; including introductions to ideas like multimedia that will take you right through creating your very own project. There's also the chance to share in over £1,200 of software that we're giving away.



```
CygnusEd Professional V3.5 Copyright © 1987-1993 CygnusSoft Software
BigBoy:gamesmith/Tutorial/battle.c                    WI    line 29    col 1
 include <string.h>
 include <exec/memory.h>
 include <exec/types.h>
 include <graphics/gfx.h>
 include <graphics/gfxbase.h>

#include <proto/exec.h>
#include <proto/dos.h>
#include <proto/graphics.h>
#include <proto/intuition.h>

#include "GameSmith:GameSmith.h"
#include "GameSmith:include/proto/all_regargs.h"
#include "GameSmith:include/libraries/libptrs.h"

#include "gfx/tank_blue.h"   /* need collision table defines */
#include "gfx/tank_gold.h"

#define TURN_RATE   4      /* number of vertical blanks before allowing next turn */
#define PLAYERS   2        /* number of players */
#define FLICKER_DELAY   (50*2)   /* invulnerable period after being shot (in seconds) */

#define MAX_SPEED   4   /* maximum bullet speed (n * tank speed) */

#define SOUNDS 5      /* five different sounds per player */

#define SHOOT  0      /* bullet shot sound */
```

***Above:* You need some programming knowledge to use GameSmith.**

> **"GameSmith won't teach you how to program: ideally you will already have experience."**

GameSmith won't teach you how to program: ideally you will already have some experience with C or Assembler and will have already had a look at the Amiga hardware. What GameSmith does do is help separate the "game logic" from the "hardware programming" we looked at earlier. With the library of functions to fall back on, you can concentrate on the gameplay and leave the hard work of jumping the hardware through hoops to someone else. Scrolling the screen, loading backdrop images, sound effects, animation, sprites – all are controlled with library calls you can easily add to your program.

If you are an experienced Amiga programmer and you can already set up custom copper lists, parallax scrolling screens and define object collision tables then there is little that the GameSmith library can do for you (however, see CITAS below). The point is that most of us won't have spent so much time creating such a library and so this is an ideal way to get a head start.

As an added bonus, GameSmith includes a package called CITAS. Normally, when writing a game in C or Assembler it is always a hassle to get graphics into the code. You need to mess around with utilities and sometimes write your own programs to convert the graphics into something you can program with. It's a pain. CITAS is a powerful utility designed specifically for processing graphics. Now you can design your alien spaceships in Deluxe Paint, load them into CITAS and process them in comfort. Spin them around, set up collision masks and then generate C or Assembler code automatically. It will save days of work.

GameSmith

Price:	£89.95
Supplier:	HiSoft
Knowledge:	Advanced programming
Contact:	01525 718181

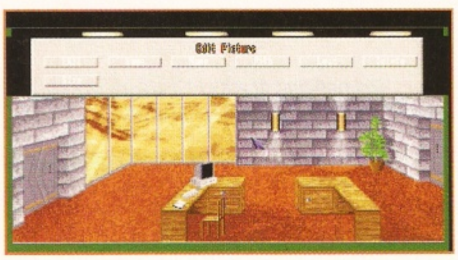
Verdict: 82%

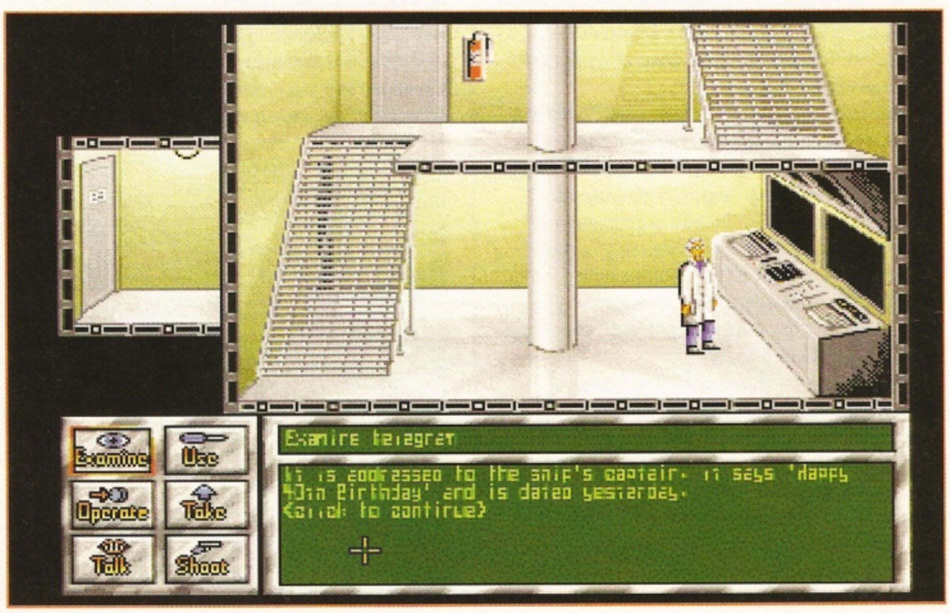
GrAC v2.0

Do you like games such as Monkey Island or Beneath A Steel Sky? If you do then you'll be delighted with version 2 of GrAC, the Graphical Adventure Creator. This is a program which allows you to create your own adventure from scratch. All you need is a plot, and enough time to create backdrops and characters.

There is plenty to do in order to create a good graphical adventure, but GrAC leads you through the stages one by one. You will need to define characters, objects, rooms and the way they all interact. The graphics must all be in standard IFF format which means you can either spend some time with Deluxe Paint or invest in a scanner or digitiser. Each location is given zones which the player can walk to, and of course there are plenty of computer controlled characters to talk with, and objects to pick up and use. The adventure game itself depends on scripts which run in the background. The scripts do everything from controlling how the other characters walk on screen to animating objects which your player can pick up.

In this update, there is provision for close-up images (for examining maps for example) and the player can control more than one character if required. Animations can be incorporated into the room settings, which means that lights on panels can flash, taps can drip and so on. There are many other advanced features too, such as the ability to scale characters automatically as they walk into the distance.





***Above:* Creating the rooms within GrAC 2, a package designed to give power to novices. *Right:* And the end result as shown off in the sample game, Lethal Formula.**

Games mastered!

We may not cover games in Amiga Shopper, but the means to create them we do. **John Kennedy** *explores the world of games programming on the Amiga.*

> **"Game design is what makes one game different from another."**

Games themselves may never have featured in Amiga Shopper, but that is not to say that the programming tools required to produce them are out of bounds.

There are four main problems to face when programming games on the Amiga. Getting the balance right between them is what makes one game a top seller, and another a complete waste of disk space. It's unlikely that one person will be able to excel in all fields, but it has been known to happen. The main factors in games programming are:

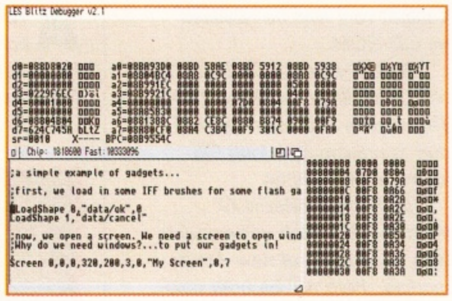
1. Game design
2. Programming the game logic
3. Programming the Amiga hardware
4. Graphics and sound

Game design is what makes one game different from another, and you don't even need a computer to do it. All you need is your imagination and a notepad to scribble on. A brilliant game design will be obvious, fun and yet technically possible. Wondered how Worms made it to different platforms? Although the first version was developed on the Amiga, the game design was so impressive it was snapped up by Team 17 and moved to the PC and consoles.

The game logic is different. In a PacMan game, it's the logic which decides how to move the player's character depending on which key is pressed. The logic must make the dots get eaten, move the ghosts, keep the score up to date – there is a lot of work involved. In many cases the logic is actually completely separate from the game graphics and sound effects: think of a game like Sim City or Theme Park – clearly there is a lot of work involved "behind the scenes" in games like these; and once they've been perfected it makes sense to make them as generic as possible to make porting them over to different machines as easy as possible.

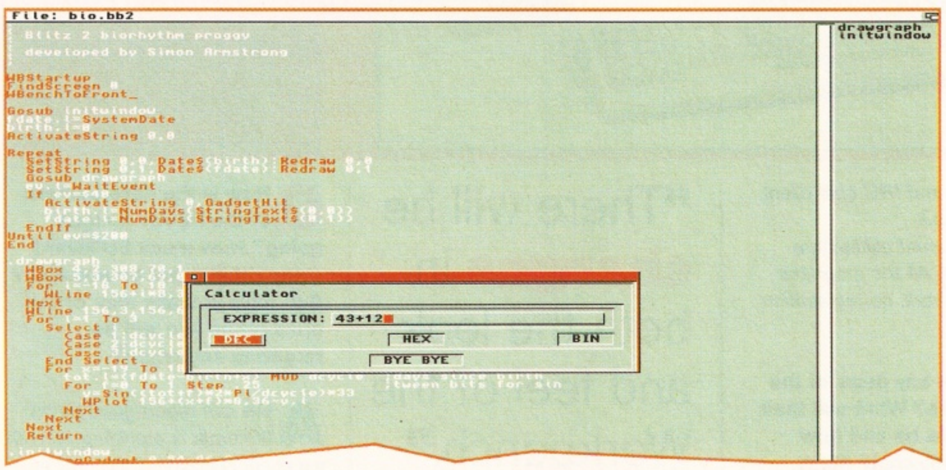
On the other hand, games like Breathless or Gloom require such fast and impressive graphics that the gameplay can be of almost secondary importance to the graphics. In this case, porting the game to another machine would require almost a total re-write.

Some games developing tools handle a lot of the game logic for you. The once-popular system SEUCK was designed to make creating shoot-'em-ups as simple as possible by creating a framework with many different options. At heart the gameplay was identical from one game to the next, although the number of options disguised this fact quite well. Inevitably though, the sameness would creep to the surface and the end results would be unsatisfying. Adding more and more feature options would have been



Blitz allows control over the hardware at the most fundamental level.

Below: ***Blitz Basic was designed to make programming the Amiga as easy as possible.***



Jargon buster

Amiga hardware: The Amiga has several custom chips which control the graphics and sound: it is these chips which make the Amiga so powerful. The chips are very complicated, and require a lot of programming to achieve results.

Assembly language: A low-level program requires a low-level language – and that is what Assembly language is. It programs the processor using the simplest instructions it can deal with: machine code. It's tricky to use, but the code will be as fast as possible.

BASIC: Beginners All-purpose Symbolic Instruction Code. A relatively easy to use programming language.

C: A powerful language, which is easier to use than Assembly but equally powerful. Also suitable for extremely large programs such as Operating Systems.

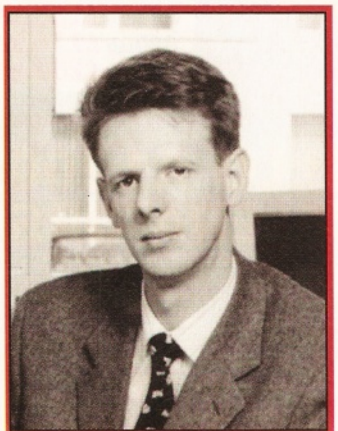
Straight talk



To keep Amiga Shopper readers up-to-date with new developments for the Amiga, **Sue Grant** *talked to Gilles Bourdin of Amiga Technologies...*

Sales of the Amiga in the UK haven't gone according to plan, the Escom store staff don't appear to know much about the machine anyway and, as we reported last month, Amiga Technologies GmbH (UK) have shed some of their staff and moved to join Escom at their headquarters near Stansted Airport.

What's going on? And what new plans are afoot for the development of the Amiga? To find out, Amiga Shopper asked Gilles Bourdin of Amiga Technologies some pertinent questions.



> "Moving the **offices** to the Escom headquarters is a decision we took to reduce costs."

Q How many A1200s and A4000s have been sold so far in the UK and Germany?

A *We have sold about 40,000 units worldwide in three months (October, November and December), and only 5,000 in the UK.*

Q Why were the 60,000 A1200s that you planned to sell in the UK before Christmas 1995 not sold?

A *Our main distributor, who issued this forecast, went into financial difficulties last year, just before the Christmas season.* [SDL and Silica were trading under an Administration Order and were then bought out by Anglo Corporation PLC recently.] *We meanwhile found a new partner but we missed the Christmas business in the UK.*

Q Why have Amigas never really been advertised, except for sparsely in the Amiga press and in your Escom brochures? Will they be advertised more in the future? If so, where?

A *In 1995, we wanted to concentrate our resources on the existing Amiga market that had to be revived. After this period of "internal marketing", as we call it, we will place advertisements in non-Amiga magazines and focus our PR effort on the daily press and the PC as well as the Macintosh press. Of course, we are dependent on Escom's funds and, as you know, Escom's results were not as satisfying as expected.*

Q Why were the problems with running Scala MM300 with the Amiga Magic bundles not picked up before the machines went on sale?

A *This was not an unknown issue. Scala should be seen as an extra for the user. We know that Scala needs a memory expansion. The user has the option to use it later on if he expands his Amiga. Furthermore, Scala is free of charge for the user. Its addition to the bundle did not affect the street price.*

Q There have been problems with games software being incompatible with the floppy drives in the new Amigas. Why was this?

A *The floppy we are using with the new A1200 is not from the same brand as the Commodore floppy. This is no problem in normal use under the Operating System. The OS provides an interface between the hardware and the user that makes such minor technical changes transparent. There are some games that bypass the OS and this can lead to problems like the one we had. But this is not a quality problem with our manufacturing. We have now released a little hardware fix that can be easily installed by the Amiga dealer upon request, at no cost to the customer.*

Of course, we also encourage software developers to respect the programming guidelines to avoid such experiences in the future, especially when the Power Amiga will be released.

Q We have had many readers complaining that the staff in Escom stores make no attempt to sell them Amigas, but steer people towards PCs. Will there be any attempt to redress the balance and make the staff realise the need to sell Amigas? It seems to be caused by their desire to earn more commission which they can make from more expensive PCs. How can you redress this? Could you run a prize for the member of staff who sells the most Amigas, for example, as an incentive?

A *Yes, we are aware of this problem. You might remember our hesitancy to include the Amiga in the Escom shops. This was precisely because the staff in Escom shops are not always trained to sell Amigas. But because of the problems we had with our main UK distributor, we took the decision to sell Amigas in Escom shops. To improve the situation in Escom shops, we have started an employee training scheme in Germany, which we will extend to the UK later.*

Q Is there any reason why some Escom store staff have told our readers that the Amiga won't be manufactured for long?

A *This can only be related to the misinformation and lack of interest from these people. Some PC freaks do not like the brand new Amiga, just as some Amiga fans don't like the PC.*

Q Why has Amiga Technologies UK moved to the Escom HQ? And why have most of the AT UK staff been let go, in particular Jonathan Anderson?

A *Economic reasons only. We had to adapt the size of our*

NEARLY DOUBLES THE SPEED OF THE A1200

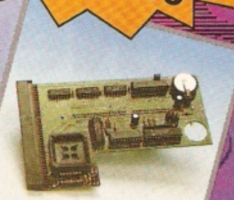
CLOCK CARTRIDGE



Our unique and highly rated external Clock Cartridge will enable your Amiga to continually store the correct time and date in its own battery backed memory.
Simply plugs onto the back of the Amiga and does not invalidate the warranty.
Compatible with ALL Amigas

ONLY £19.99
(plus £1.00 postage and packing)

MEMORY EXPANSIONS



A1200 trapdoor fitting memory expansions feature a battery backed clock and a socket for an accelerator FPU.

2mb £99.99
4mb £149.99
8mb £259.99

A500 & A500+ HARD DRIVES



These hard drives simply push onto the side of the A500 or A500+ and will give your computer all the benefits that hard drives offer. The drives are supplied formatted, partitioned and have Workbench installed for immediate use.
Full instructions and software supplied.
The hard drive also has the facility to add 2, 4, 6 or 8mb of RAM inside it.

A500/+ 250mb HARD DRIVE £209.99
Additional RAM for the hard drive £89.99 per 2mb

DATAFLYER SCSI+

Now includes CD ROM drivers and instructions.

The Dataflyer is a 16bit SCSI II controller card that converts the signals on the internal IDE interface to also run SCSI devices at the same time as the IDE hard drive.



The Dataflyer SCSI+ will operate up to 5 SCSI devices such as CD ROMS, hard drives, SyQuest removable drives, tape back up drives etc.
Unlike other SCSI interfaces, the Dataflyer SCSI+ is compatible with all known accelerators etc and it does not stop you from utilising any of the important expansion ports on your A1200/A600.
The Dataflyer SCSI+ easily installs into the A1200/A600 (simply pushes in, no need to remove the metal shield) and provides a 25 way D connector through the blanking plate at the back of the A1200.
Full instructions and software supplied.

DATAFLYER SCSI+ ONLY £69.99
SQUIRREL SCSI INTERFACE ALSO AVAILABLE £59.99
PCMCIA fitting SCSI interface

DISCOLOGY



Discology is the ultimate in disk copying power for the Amiga. The package comprises the Discology Disk, manual and Discology cartridge for making copies of heavily protected programs with an external disk drive. Discology will also format disks, check disks for errors etc.
PLEASE PHONE FOR A FULL INFORMATION SHEET

£19.99 EACH OR BUY BOTH FOR £24.99

AMAZING SPECIAL OFFER

NEW FOR 1996

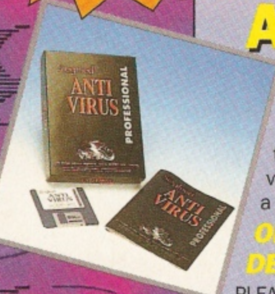
EZ DRIVES



Incredibly fast (up to 4x faster than a ZIP drive) SCSI drive will store a massive 135mb per cartridge. Comes complete with power supply, SCSI cable, instructions and cartridge.
THE ULTIMATE REMOVABLE DRIVE

ONLY £234.99
or £274.99 with a Squirrel or Dataflyer
135mb EZ cartridge £15.99

ANTIVIRUS



Anti Virus Professional is the most powerful tool for detecting and removing viruses. Anti Virus pro will check and device hard drives, floppy disks and *even CD ROM drives* for viruses. Very straight forward to use, includes a full 50 page manual.
ORDER NOW BEFORE A VIRUS DESTROYS YOUR SYSTEM !!!
PLEASE PHONE FOR A FULL INFORMATION SHEET

NEW FOR 1996

DATA FLYER 4000SX

A4000 SCSI controller expansion card that allows up to 7 SCSI devices to be connected to the A4000. Includes full user manual and installation software including CD ROM drivers. Includes connecting cable for internal SCSI devices and rear mounting bracket with a 25way connector for external devices.

DATAFLYER 4000SX ONLY £94.99

SIMMS AND FPUS



72 pin SIMMS suitable for Apollo accelerators, A4000, A1200 memory expansions etc.

1mb £39.99
2mb £77.99
4mb £114.99
8mb £219.99

33MHz 68882 FPU (plcc) £49.99
40MHz 68882 FPU (plcc) £69.99
50MHz 68882 FPU (PGA) £79.99
All FPU's are supplied with crystal oscillators

NEW FOR 1996

ASIM CDFS 3.0

This superb package is a must for any CD ROM user. Includes CD32 & CDTV emulation, audio CD player software including librarian features, direct reading of 16bit audio samples, full support for Kodak and Corel PhotoCD Discs. Includes the 'FISHMARKET' CD ROM disk packed with public domain Fred Fish disks and a huge 115 page information packed spiral bound manual.

ASIM CDFS ONLY £49.99

ZIP DRIVES



Highly rated SCSI drive will store 100mb per cartridge. Comes complete with power supply, SCSI cable, instructions and cartridge.

ONLY £189.99
or £229.99 with a Squirrel or Dataflyer
100mb ZIP cartridge £15.99

"If you print without it, you have only yourself to blame!"*

*Review in German "Amiga Plus" Magazine Dec 95

AMIGA-TEST very good TurboPrint Prof. 4.0 11.0 out of 12 OVERALL RATING SEPT 95

AMIGA SPEZIAL Turboprint prof. 4.0 Overall Rating: Very Good

AMIGA plus 12/95 Award '95

TURBOPRINT Professional 4.1

Our enhanced printer driver system has now got even better!

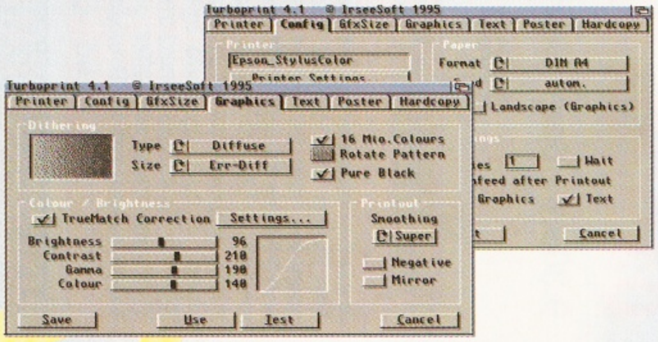
Outstanding: TurboPrint will not only output 24 bit-graphics directly from your floppy or hard drive in the highest quality possible, but will also print **from applications** like Personal Paint, Deluxe Paint or Brilliance with the **full colour palette** available with AGA-graphics chipset. Although utilising the standard Workbench printer interface, printout will **not** be limited to the usual 4096 colours.

Perfect printouts from day one:

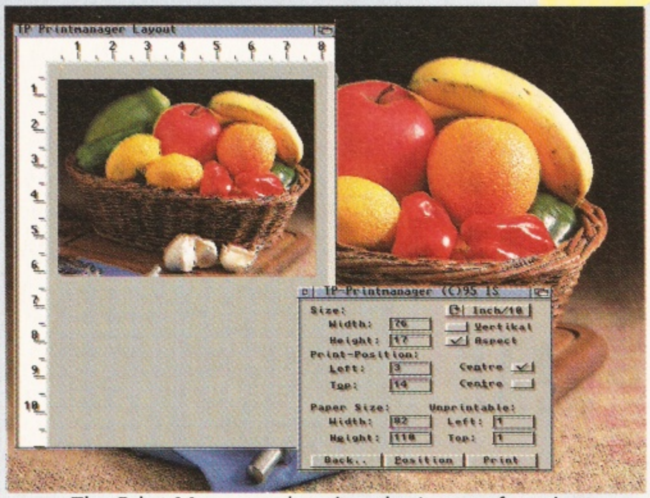
TurboPrint combines ease of use with **unparalleled output quality**. Simply choose your printer, and go: With our brand new **intelligent printer drivers** you'll get fantastic results straight away.

Matching colours: With the new high-speed **"True Match"** colour management system up to **16 million colours** are closely represented by the printout.

Various settings, like brightness, contrast, colours, and many more, allow for **individual configuration**.



The Preferences Menu with 7 "Index-Cards"



The Print Manager showing the Layout function

Improved Graphics Print Manager:

Our integrated multi-format print and display utility has been considerably improved. New functions include support for **JPEG,** BMP, IFF DEEP ILBM, and many more.

Any picture up to 16 million colours may be displayed either in true colour (with **CybergraphX** on third party graphics cards) or dithered with up to 256 (AGA) or 16 colours.

The new **Layout function** allows for precise mouse-controlled selection of printout size and position.

No need for test printouts: The Graphics Print Manager will allow the user to control the results of all changes made to the print parameters (Brightness, Gamma Correction, etc.) directly **on-screen** before printing.

Make your printing dreams come true!

Easy to use:

- ✓ Intuitive and clearly arranged preferences menu. Style guide compliant. May be **hotkey-activated** at any time.
- ✓ **Hard copy function** for fast printing of screens.
- ✓ **Poster function** for oversized printouts.
- ✓ **Compatible** to your existing Amiga software: No difference in printing, except new levels of quality.
- ✓ Will run on every Amiga model with Workbench 2.0 or higher.
- ✓ Supports even the latest **printer models**, such as Canon 610, Epson Stylus Pro/Color II/IIs, HP 660/850.

Press Reviews about TP Pro 4 - "Best Choice"

"TPrint 4 is the new leader in every respect. It is simply the best choice"

Amiga Special 9/95

"Hard copies with cutout-function, poster printing, a comprehensive manual and lots of improvements form an **outstanding printer driver system**"

Amiga Plus 8/95

"The already impressive print results have been further improved, with the new True Match system playing an important role. **Handling could not be much easier.**"

Amiga Magazin 9/95

RECOMMENDED RETAIL PRICE £49.99

Ask for TurboPrint at your local computer store, or contact

IrseeSoft
Meinrad-Spieß-Platz 2
D-87660 Irsee, Germany
Tel: +49 (0) 8341-74327
Fax: +49 (0) 8341-12042

WIZARD DEVELOPMENTS
PO Box 490, Dartford,
Kent, DA1 2UH, England
Tel: 01322-272908
Fax: 01322-281311

Dealer enquiries are welcome!

Multimedia workstation



Eyetech have got together with Optonica to produce a multimedia upgrade bundle for your A1200. The bundle consists of Optonica's multimedia authoring system M.M.Experience and Eyetech's A1200 AV hard drive upgrade kit. The 1.083Gb AV drive, M.M.Experience and utilities cost £229.95 (including VAT).

For further info contact Eyetech on ☎ 01642 713185, or E-mail them at eyetech@cix.compulink.co.uk.

If you want to know more about M.M.Experience, check out our multimedia feature in the Christmas issue of AS. And in this issue we explain how to create multimedia pages using M.M.Experience in our feature over on page 28. Then turn to page 35 where you could be one of 10 lucky winners who will share over £1,200 of multimedia software!

AMIGA POWER

The March issue of AMIGA POWER is quite the in thing. It contains incisive reviews (of Speris Legacy, World Golf, Player Manager 2 Extra and Star Crusader), instructional hints, tips and cheats (on huge numbers of games), an informative feature (on Amiga wargames) and an incitement to rebellion (in our handy pull-out supplement, The AP Guide To Revolution And Insurrection – AMIGA POWER to the people). It's all interwoven with the sort of invective wit upon which our regular readers insist and it'll be in all reputable newsagents from Thursday, 29 February. Indispensable. (That's enough of the 'in' joke for now. Oh, I say, that's rather clever – AP Ed.)

An Editor,
AMIGA POWER

AMIGA FORMAT

-------+++++++ connection established++++++ ++++++downloading data+++++++ Greetings from the virtual dimension of the cyber-real Internet (or something like that). In this month's Amiga Format we will be assessing the impact of the Amiga Technologies "Surfer" bundle – will it sell thousands of new Amigas? Is the software any good? How viable is the modem for downloading graphic-heavy Web pages? Would you be better off going for a PD solution? These are some of the questions our dedicated infonauts will be attempting to answer. Plus of course, we'll have reviews of the month's biggest games and serious software, hints, tips, help and tutorials on Blitz Basic, Real 3D and, oops, I just exceeded my bandwith. Later +++++++Carrier dropped

Titbits

Cheap Fast RAM

Premier Mail Order are offering RAM at unbelievable prices: 4Mb 72-pin 70ns SIMM for £119.99; 8Mb 72-pin 70ns SIMM for £239.99 and a 16Mb 72-pin 70ns SIMM for for £445.99. Plus a PC1208 RAM board (bare) for £59.99. All these prices include VAT and delivery.

Contact Premier Mail Order on ☎ 01268 271172.

Let's network

In response to our Amiga-Link review last issue, Hydra Systems have been in touch to remind us that they have been supplying networking hardware and software for the Amiga for years. For all your networking needs contact Hydra Systems on ☎ 01203 41111.

Coverdisk fiasco

You'll be glad to know that two of the programs which are rated highly in this month's PD section are actually available on the Coverdisk of Amiga Format this month (AF83). Fiasco, the new database program, and Analyser the Lottery predictor from John Cassar are both included. This is not down to a devious crossover plot on our part, but arose from the fact that there was nowhere near enough room to fit Fiasco's 600K+ on our disks, and we recently featured a full lottery program anyway. If you do want to get these programs, you know where to look.

Amiga Shopper's mail order buying guide

To make buying by mail order as easy and as safe as possible, Amiga Shopper has put together the following top 10 tips to buying mail order products:

1 Before you send any money for goods, telephone the supplier to make sure that the item you require is in stock.

Ask questions about the mail order company's policy on delivery and returns of faulty equipment. Make sure there are no hidden costs such as postage and packing. Find out when you can realistically expect to receive your goods.

2 Always read the small print on advertisements.

3 Beware of companies that do not include their address on their advertisements. Avoid companies which do not answer or return your telephone calls.

4 Pay by credit card where you can. If you are ordering goods of more than £100 in total value, you are legally entitled to claim compensation from some credit companies if the retailer goes bust. Check your credit card company's policy. You can also try to get extra insurance in advance.

5 Always keep records. If you are buying by credit card, keep a note of the time of the order and ask for an order number. When ordering anything over the telephone, always double-check the price.

6 If you are not paying for the goods by credit card, pay by cheque instead. Never send cash through the post, and avoid using postal orders.

7 If you are sending a cheque, keep a note of the cheque number, the date and the exact value. Make sure you know the exact name of the mail order company too.

8 When you receive your goods, check them carefully. If anything is missing or faulty, contact the supplier immediately.

9 Always order goods from the most recent issue of Amiga Shopper.

10 If a problem arises, contact the supplier in the first instance. Calmly and politely tell them your problem. Most problems turn out to be minor hitches or misunderstandings that can easily be resolved without taking the matter further.

If you think you have a grievance, contact your local Trading Standards Officer. The number is in the phone book.

News

AT sign Viscorp deal; two new printers from Canon; multimedia upgrade bundle; plus your chance to win a Siamese System pack...

Amiga Technologies sign deal with Viscorp

Amiga Technologies GmbH have finalised an international license agreement with Viscorp (of Chicago, USA) to adapt, utilise, license and distribute Amiga technology within Viscorp's interactive intelligent set-top TV appliance; Electronic Device (ED). The license gives Viscorp the right to use, re-license and distribute the Amiga's Operating System and compatible parts of current versions of the technologies where the Amiga products are used as, or as part of, interactive TV devices.

This decision reflects the ideas for the Amiga's future which have been talked about for years, but which Commodore never acted upon.

"By utilising our unique set-top appliance and incorporating the Amiga technology, Viscorp is able to provide a complete practical solution for interactive TV-services, and now the ability to access the Internet through a standard TV set with pricing that makes sense for the average TV viewer," said Jerome Greenberg, Viscorp's chairman of the board.

Basically, this means that you will be able to use the Internet, on-line services and voice "chat" programs through your TV. By using the sophisticated Amiga chip set, Viscorp will provide a complex set-top appliance with multitasking functions to integrate the TV set, phone line and network service providers; at an affordable price, apparently. This ability has never been available through any existing systems before.

> "You will be able to use the **Internet,** online services and voice programs through your TV."

There are also plans that will mean you can play games either on your own or with a networked opponent, or you could even do a spot of shopping or electronic banking; you will also be able to gain access to information services through your TV.

You can find Amiga Technologies GmbH on the Internet at: http://www.amiga.de

10 new products at World Of Amiga!

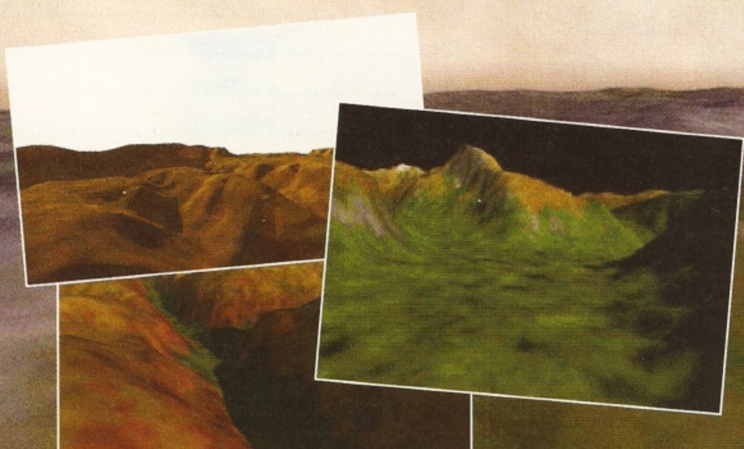
There will be at least 10 new Amiga products or upgrades launched at the World Of Amiga Show. Digita International will be showing the latest versions of their word processing program; Wordworth 5 and Wordworth 5SE, which has been developed especially for A1200 users with only one disk drive and 2Mb of memory. We will have a full review of Wordworth 5 next issue. Digita will also be showing Organiser 2 and Datastore 2.

HiSoft Systems have a new version of the Squirrel SCSI interface called Surfin' Squirrel up their sleeve and they will be revealing it at the Show too. Also on show will be the Squirrel MPEG which enables you to play video CD and CDi discs from SCSI CD-ROM to your TV, broadcast monitor or video recorder.

Terminate TCP, CinemaFont, CinemaWorld and CinemaTree are four more HiSoft products which will make their debuts at the WOA.

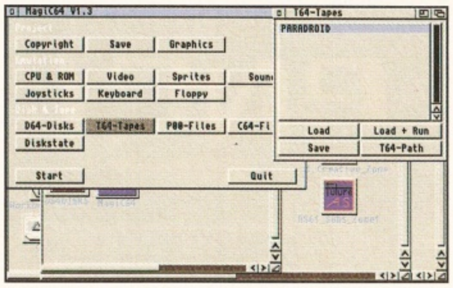
The World Of Amiga is on 13th and 14th April 1996 at the Novotel in Hammersmith, London. Advance tickets are available on ☎ 01369 706346.

Landscape generator



A new landscape generating program for use with LightWave 4 will be on the market on 1st April. Kryonix Design's VirtuaScape program contains accurate models of real life locations, such as the Grand Canyon; it also has some fantasy landscapes and multiple weather models, plus many other promising features. VirtuaScape will cost £54.99 when it is released. However, if AS readers order the program now they can save a massive £15 and buy VirtuaScape for only £39.99.

Further details can be obtained from Kryonix Design, 6 Kingsnorth Gardens, Folkestone, Kent CT20 2QW.



Magic C64 is one of the best emulators of the C64 for the Amiga. Go retro!

preferences. Details can be found in the ample documentation.

TechnicalZone

● **Enigma II Project (Authors: Harvester & Hosot)** should only be used by experts. I warn you again, this program could destroy your hard drive if you don't know what you are doing. Why? Because this is an encryption utility that really does protect your hard drive.

Unlike other password systems which can be easily bypassed, this system will make your partition non-DOS and can only be accessed after inputting the password. For this reason, don't ever install it on your boot partition!

The risks in using a program that makes a partition non-DOS are obvious, but if you need a partition safe, then this is the answer.

● **Start Menu (Author: John Corigliano)** is a nice clone of the Wind*ws95 Start bar which sits at the bottom of the screen. It's quite a fun launcher and slightly different to the others that have been around for a while.

● **Taskbar (Author: Robert Ennals)** does some of what Start Menu is for. It supplies a bar along the bottom of the screen that keeps track of windows and programs opened and can jump straight to them with a single click. It's for those people who have a program launcher already.

● **Fast Exec (Author: Torbjorn Andersson)** is a CLI command that needs to be inserted at the beginning of your StartUp-Sequence. It is only useful for those with Fast RAM because the program moves the Exec.library to there and speeds up your system.

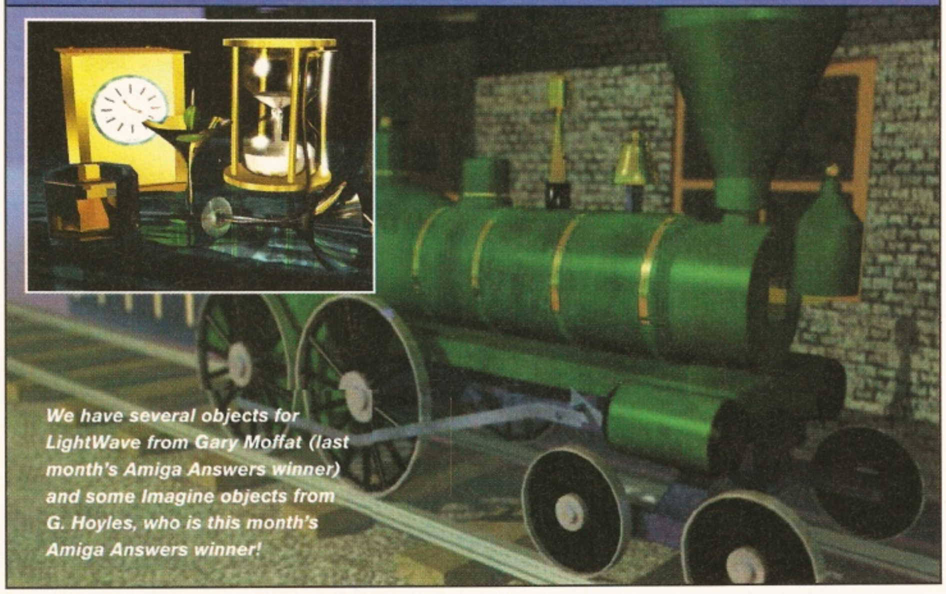
● **Activity (Author: J. Tjoelker)** is an amusing little utility that enables you to see exactly what you have been doing; monitoring mouse moves and typing.

● **ZipMount (Author: Stefano Cairoli)** is simply a set of mountlists for Zip drive owners to be able to mount PC and Mac Zip disks, as long as they have the appropriate CrossDOS and CrossMac.

● **If Qual (Author: Stefan Le Breton)** is a simple command that launches a program if certain qualifiers, such as button presses, are met.

● **Iconify Gadget (Author: Håkon Enger)** might only be a beta version, but it's so good that we had to let you try it. It simply adds an MUI iconify gadget to all you programs and windows on Workbench.

3DZone



We have several objects for LightWave from Gary Moffat (last month's Amiga Answers winner) and some Imagine objects from G. Hoyles, who is this month's Amiga Answers winner!

Disk contributions

This month's disks were compiled using files from Aminet and from Walton's Mountain BBS (☎ 0181 891 5730), and with the help of the authors of the programs.

If you would like to contribute to a future disk, whether it's a full application, utility, 40K demo, clipart, font, 3D object, or even a module, send it to:

David Taylor,
Amiga Shopper Coverdisk Contributions,
30 Monmouth Street, Bath, Avon BA1 2BW.

Please only send the minimum distribution archive. Also, please do not powerpack (or similar) any files because it detracts from the archiving.

ProgrammingZone

This zone contains not only the code that accompanies the first part of our HiSoft BASIC tutorial which starts this issue (see page 56), but also a full HiSoft BASIC program called Mimic **(Author: Neil Hughes)**, which can replay diagrams at a set speed. There is the full BASIC source code supplied.

InformationZone

The Information Zone contains another updated version of both the PD Houses guide and the User Group directory, both of which are supplied in AmigaGuide and ASCII format. This zone is here for your information and you can submit your details as described in the guides themselves. ■

Subscribers disk

Is 6Mb of stuff not enough for you? You want even more? Then you're probably already an Amiga Shopper subscriber, because, as you know, you get an extra disk FREE every month with another 2 to 3 Mb of stuff. This month you've got the excellent Freeware graphics package, GFX Lab, and the essential Scout program that gives you real control over your Amiga. "Don't forget the Address Book or the updated Exchange commodity," we hear you cry. Don't worry, we won't. Nor will we forget about EmbedIFF, PassRemb, HFMounter and FastECS which are packed on there too.



But, then, since you've taken advantage of our subscription offer which saves you money off every issue of AS, as well as offering exclusive price reductions on mail order and a newsletter in addition to this free disk, you'll know all this. So you won't want the telephone number for our Subscription hotline, which is ☎ 01225 822511, because you know that you're getting all these fantastic advantages already. Aren't you?

Shareware notice!

Remember that a number of the programs on our Coverdisks are some form of Shareware. Amiga Shopper has compiled both disks with the help of the authors, who have received no fee from us.

So, if you keep and use these programs, you *must* register. Some people only want a postcard, so *please* put in the effort. They did when they created the program.

Shopper Choice

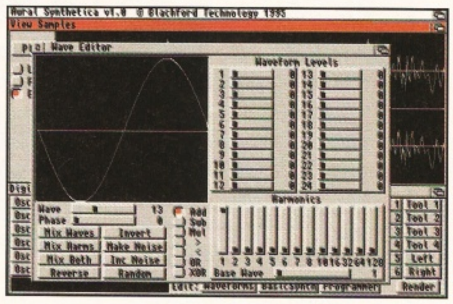


After we sorted out such an incredible offer for TurboPrint (see page 8), we could have just sat back and called it a day, but instead we hunted everywhere to track down the very best and most useful PD, Shareware and Licenceware programs for you. **David Taylor** *gets stuck in and shows you what's on offer.*

There is a real mixture of stuff on the disks this month. As well as separate programs, like a brilliant Commodore 64 emulator and demos, we have some excellent support material for your serious applications. Plus, there are exclusive demos of two Licenceware products both of which were awarded Star buys when we reviewed them.

Aural Synthetica patches

This is an entire disk of new patches created by the author of Aural Synthetica. In total, there are 168 percussion and guitar sounds as well as a smattering of other sounds. The patches can even be loaded into the demo version of Aural Synthetica which was included on our disks last month. Don't forget that you can upgrade from the demo to the full version and make proper use of these patches for £5 less than the retail price, by taking advantage of the exclusive upgrade offer we arranged. That means that you can get the program for only £25 + 50p P&P from Seasoft Computing on ☎ 01903 850378.



168 new patches for use in Aural Synthetica, compatible with last month's demo.

CreativeZone

Final Writer macros

Author: Ron Goertz

As even handed as ever, we didn't want to leave out any Final Writer users. You'll find a couple of useful macros here. The first is to rectify an omission within Final Writer's bibliography, endnotes and table of instructions options and enables you to use italics and underlining, which are essential in bibliographies. The second is a set of macros designed to help you import spreadsheet information into Final Writer.

Clicker

Author: Jeroen Vermeulen

OK, here's some light relief. This program makes your Amiga click every time you make a keypress and can be configured in a couple of ways. You can adjust the sound to suit you and you can also add the sounds to your mouse clicks. There are different versions for different processors and you can use it to annoy the hell out of your family.

Music

Author: Andy Soar

We've included a module that comes from a special series of music and sound effects created specially for games programmers. This module is designed for use in shoot-'em-up games. Programmers can get the other modules from the author, who also offers an OctaMED Technique disk, which we've

CreativeZone: Wordworth Extras

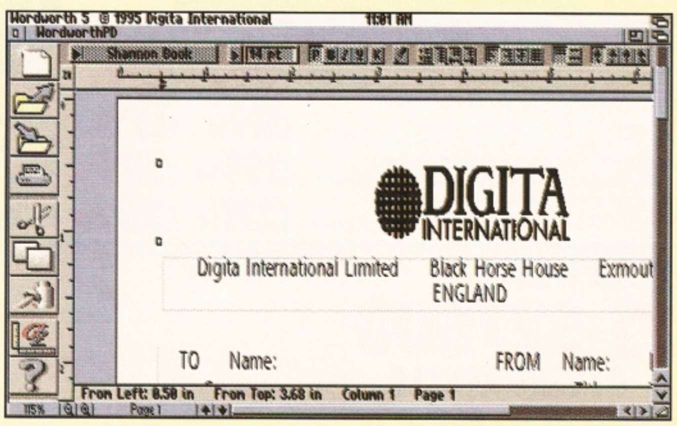
The popularity of this fine word processor is well deserved and this collection of extras, some of which were created by members of Digita's staff, adds to the users' arsenal. There are sets of ARexx macros that can be used for such things as creating AmigaGuide documents. There are also some templates included so that you can have a full range of document styles at your fingertips.

As a bonus there are some similar files for Datastore and Directory Opus 5 users included in the directory. Although this includes the full set of extras from Volume 1, you must register the package if you keep it. Ryan has already updated the volume and he is also working on further projects. Registering will get you the new version with enhancements from this set.

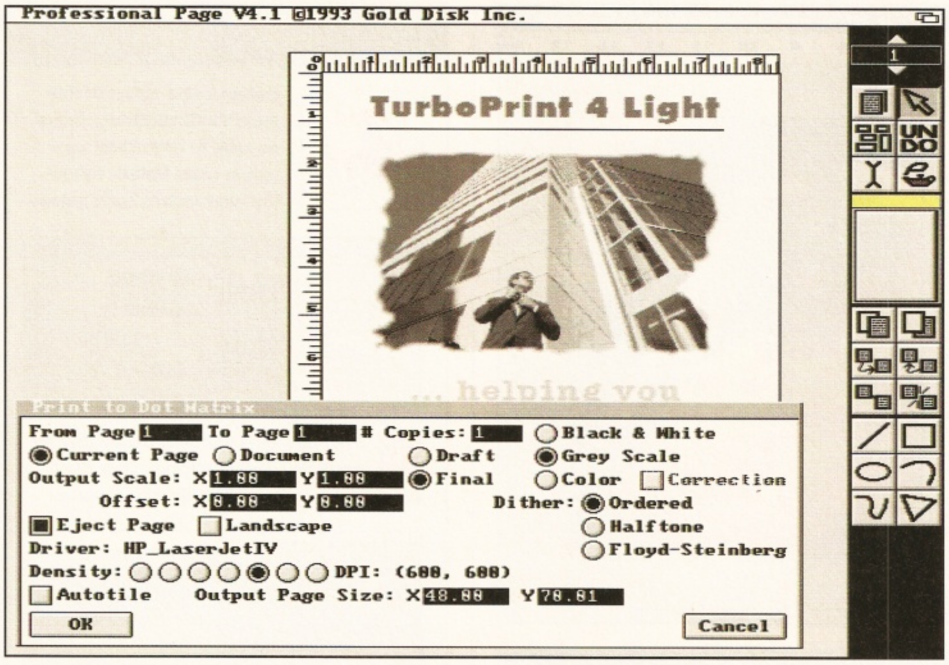
Title ____________ Initials ____________
Surname ____________
Your address ____________
____
____
Post code ____________
Description ____________ **Wordworth Extras**
Price ____________ **£1.75**

Please make cheques payable to Ryan Morse. Please post your order to: **Wordworth Extras Upgrade Offer,** Wordworth PD, 9 Tadmarton, Downhead Park, Milton Keynes, Bucks, MK15 9BE.

You may photocopy this form



The fax template for Wordworth users supplied by Digita.



Writer, Wordworth, Deluxe Paint and so on. To really give TurboPrint a test, try printing a page with some text and a picture on it. Make sure that the image has lots of colours like a photograph, because it is this type of image that a standard Amiga has real trouble with.

When you have created your page, choose Print and wait for the page to emerge from your printer. The quality of the print depends on your printer and the chosen resolution.

The great thing about TurboPrint 4.1 Light is that if you want to change the output, you have a number of options open to you that you wouldn't normally have with the standard Amiga printer prefs.

I should also point out that there are even more functions included in the full version of TurboPrint 4.1 Professional, which is available as an upgrade from TurboPrint 4.1 Light. See the box below for details. ■

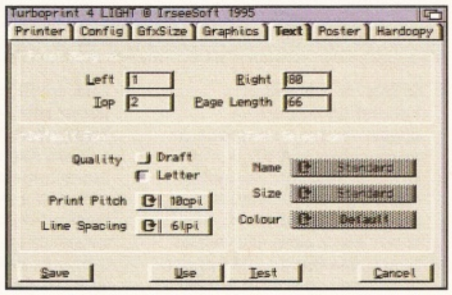
Dodgy disk?

To avoid errors when installing to floppies, ensure that your destination disks are of high quality. If an error occurs, try re-booting and using a different spare disk – the majority of errors are caused by faulty destination disks.

If your Coverdisk absolutely refuses to work and you are certain it is faulty, please return it, along with an S.A.E., to:

Amiga Shopper Coverdisk
(insert the name of the disk),
TIB plc, TIB House,
11 Edward St., Bradford BD4 7BH.

Left: ***TurboPrint 4.1 Light lets you print better quality pages from applications like ProPage on the latest printers, like the Hewlett-Packard DeskJet 850C and the Canon 610.***
Below: ***The attributes for pages being printed from text-based programs can be set in TurboPrint 4.1 Light.***

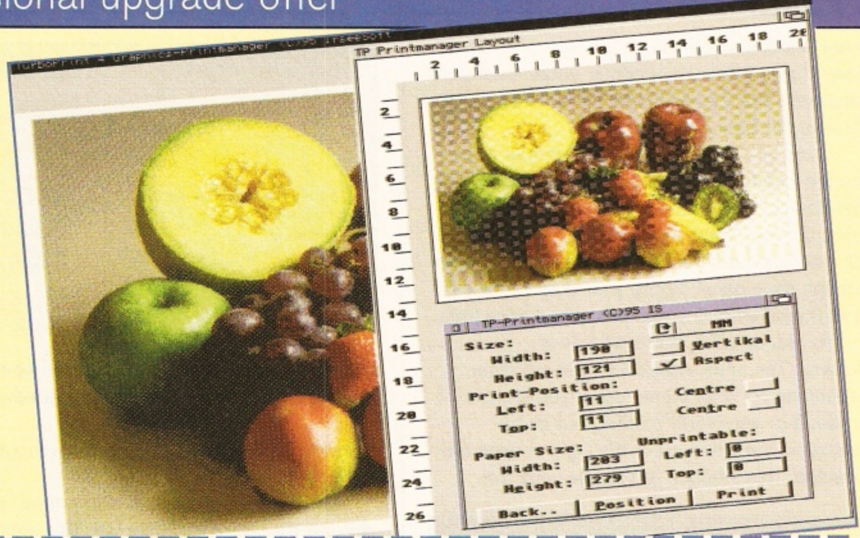


Save £15 — TurboPrint 4.1 Professional upgrade offer

Not only has Amiga Shopper given away TurboPrint 4.1 Light on our Coverdisks this month, but you can also save £15 off the normal price of upgrading to TurboPrint 4.1 Professional. Yes, we have arranged yet another special offer which is exclusive to Amiga Shopper readers.

TurboPrint 4.1 normally retails at £49.99, but we have arranged a special, discount price of only £34.99. And if you are a subscriber to Amiga Shopper you can save an extra £1 and get the upgrade for only £33.99. (For subscription details ☎ 01225 822511 – please quote your subscriber number when ordering.)

Larry Hickmott reviewed TurboPrint 4.1 in last month's printer enhancement package round-up and he gave it 90 per cent and a Star buy.



Title ______ Initials __________ Surname __________

Your address ______________________________

____

Post code ______________ Telephone ______________

Your signature ______________________________

Description	Quantity	Price	Subscribers
TurboPrint 4.1 Prof.		**£34.99**	**£33.99**
		Total £	

(Please add £4 for postage and packing outside the U.K.)

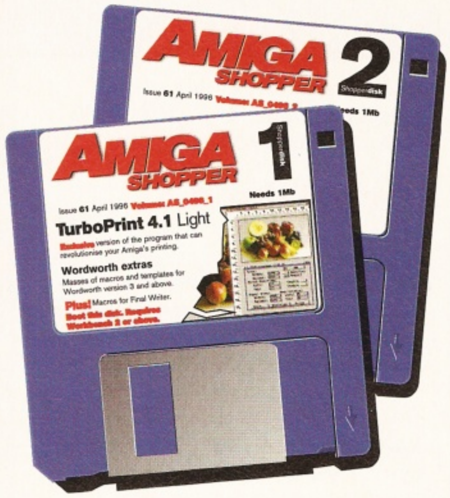
Method of payment (please tick one):

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Coverdisks

TurboPrint 4.1 Light

Time for your printer to dance with joy as Amiga Shopper gives you TurboPrint 4.1 Light, the Amiga printing enhancement package from IrseeSoft. Roll those desktop presses while **Larry Hickmott** *shows you how to make beautiful pages.*

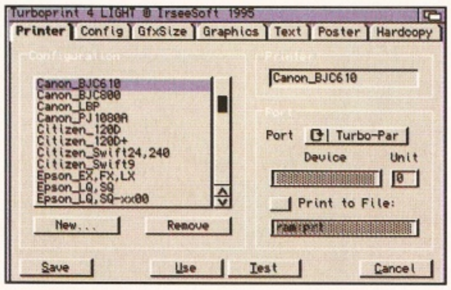
This month, Amiga Shopper is giving away a light version of IrseeSoft's acclaimed printing enhancement package, TurboPrint 4.1. With TurboPrint 4.1 Light helping you, you can forget all about those dreadful Amiga printing preferences programs and treat yourself to great-looking hard copy.

TurboPrint 4.1 Light

TurboPrint 4.1 Light is a printing enhancement package. It replaces your normal Amiga preferences with its own set of printer preference functions, as well as coming with up to date printer drivers for the very latest printers. The best way to tell you about all of its great features is to take you on a grand tour.

Using the program

TurboPrint 4.1 Light can be used from its floppy disk (preferably a copy of), or installed on a hard drive and used from there. Hard drive installation is taken care of by the familiar Commodore Installer that you all know and love.

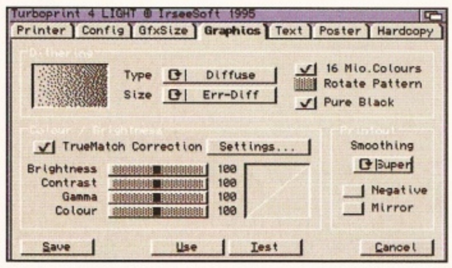


TurboPrint 4 Light supports the latest printers, such as the Canon BJC-610 (see page 39).

When TurboPrint 4.1 Light is installed on your hard drive, an icon for the preferences program will be placed in your Prefs drawer so you can choose to run TurboPrefs from either TurboPrint's drawer or from Prefs. TurboStart can also be placed in the WBStartUp drawer so TurboPrint is running when you start your Amiga.

Once you've opened TurboPrint's directory on your hard drive or the TurboPrint disk icon, you will see a number of programs. The main ones are TurboPrefs and Print Manager.

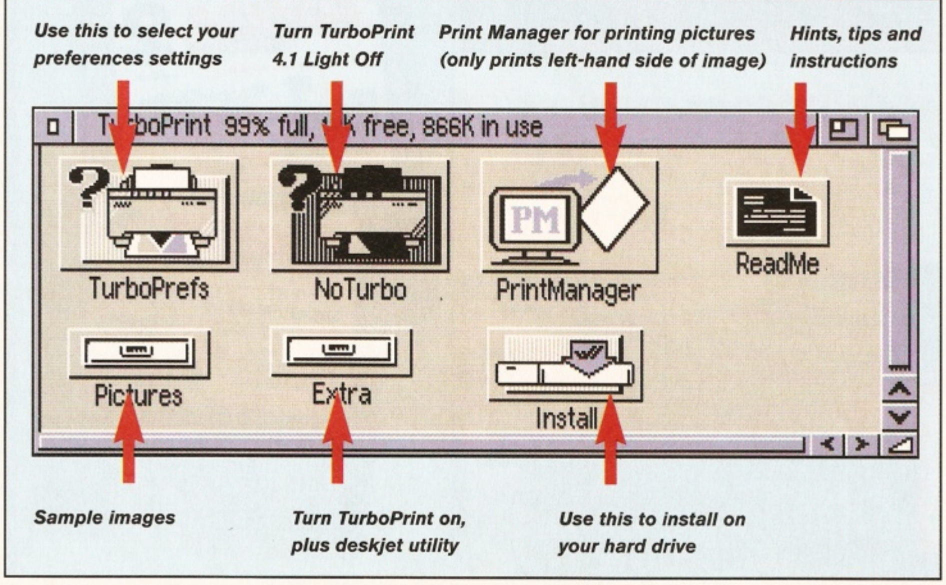
TurboPrefs is where you choose the printer driver to use, the page size and many other settings. Print Manager, on the other hand is a picture printing program.



The dithering used to simulate shades of grey and colour is controlled from the Graphics Preferences panel.

The version of Print Manager that comes with TurboPrint 4.1 Light has one very noticeable limitation in that it will only print the left-hand side of the image. This allows you to see the great quality you can get with this program should you wish to upgrade to TurboPrint 4.1 Professional.

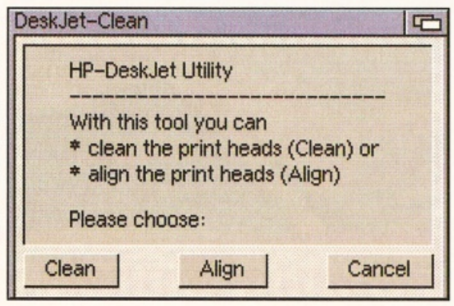
The meaning of icons...



Setting up for your first print

Before you can use Print Manager, you will need to set your preferences in TurboPrefs. Do this by opening (double click on) the TurboPrint disk icon and then do the same with the TurboPrefs icon.

The first task with TurboPrefs is to tell it what printer you have by choosing one of the printer drivers from the list gadget. If your printer



TurboPrint 4.1 Light comes with a free deskjet utility for the new range of Hewlett-Packard deskjet printers that now require software for cleaning the print heads.

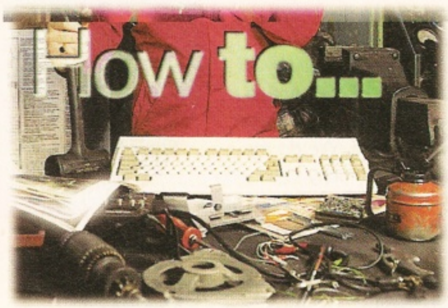
The **essential** magazine for Amiga enthusiasts

AMIGA SHOPPER

Shopper**Features**

Interview ___ 22
To find out what Amiga Technologies are up to, **Sue Grant** talks to Gilles Bourdin.

Games mastered! ___ 24
Games may never feature in Amiga Shopper, but we still want to know how to create them. **John Kennedy** explores the software available.

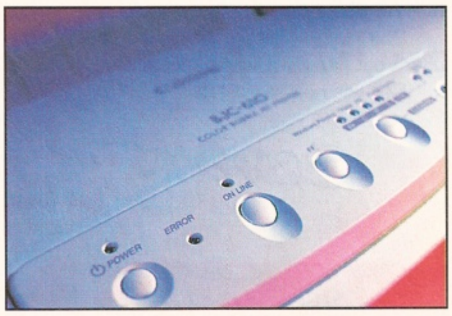


Ultimate DIY ___ 28
Over the next few issues, we will be running a feature exploring the various ways of expanding and enhancing your Amiga. **Dave Taylor** and **John Kennedy** kick off this new series.

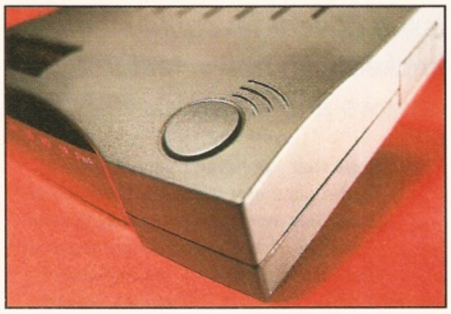
Shopper**Reviews**

Final Writer 4 Lite ___ 36
Larry Hickmott reviews the new, cut-down version of Final Writer 4 from Softwood.

Canon BJC-610 ___ 39
The Epson Colour Stylus has competition in the form of Canon's latest printer. **Larry Hickmott** gives the BJC-610 a test run.



Believe it or not, this is the Canon BJC-610. (Nick got a bit carried away on the photoshoot!)



The new modem from Online PD is bundled with a software pack to cover all aspects of Comms.

Shopper**Reviews**

Blitz Basic 2.1 ___ 41
Paul Overaa reviews the latest version of this powerful programming language.

Mr. Modem ___ 42
This new modem comes with a bundle of Comms software. **David Taylor** gets connected.

Four Square drive ___ 43
Brian Fowler's new HD floppy drive is slim and sexy. **David Taylor** reviews his competition.

AMOS Pro Compiler 43
F1 Licenceware have re-released Europress's AMOS extension. **Steve Bye** takes a look.

Counting House ___ 44
This brand new business manager from ARK is certainly impressive. But is it any good? **Larry Hickmott** finds out.

CD-ROMs ___ 47
David Taylor reviews two, brand new CD-ROMs that sit perfectly with our Ultimate DIY feature on page 28.

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The first part of our HiSoft BASIC tutorial explores Operating System support mechanisms. **Paul Overaa** is your host.

Music ___ 58
Darren Irvine and **John Kennedy** explain how to get started with Amiga music making. This month, they discuss sequencing.

AMOS ___ 60
In the last of our AMOS tutorials, **Steve Bye** has compiled 20 top tips for you.

Comms ___ 62
Want to chat on the Net? **Darren Irvine** can help with his explanation of IRC.

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We have some more stupendous programs and utilities for you on both of our Coverdisks: TurboPrint 4.1 Light, Wordworth extras, sample patches for Aural Synthetica, plus loads more!

News ___ 14
Amiga Technologies sign deal with Viscorp; two new printers from Canon; a LightWave landscape generator; new ARexx compiler; plus, win a Siamese System pack from Hi-Q.

Amiga Answers ___ 50
We have answers to all your IntOS problems this month, and a few of your frequently asked questions are solved too. Remember, you can also win a handy £25 if your image is printed here, so keep your entries flowing in.

Public Domain ___ 68
More excellent programs from the Public Domain reviewed by our very own **Dave Taylor**.

Letters ___ 78
Win 25 quid for letter of the month. Plus, the winners of our CD competition are announced.

Next month ___ 82
We have another stunning issue for you next month. On sale, Tuesday, 2nd April 1996. Don't miss it, reserve your copy today!



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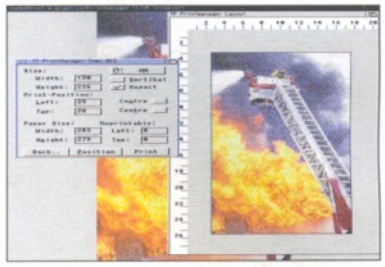
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Turbo**Print 4.1 Light**

TurboPrint has been causing quite a stir over in its native Germany; and now this version is available in the UK and has been received with top reviews, including 90% in AS60. Our version has been prepared exclusively for Amiga Shopper readers and allows you to try out all the features of the full program. Even better, we've also secured an exclusive upgrade offer so that you can get the full version for only £35, which is an amazing £15 off the retail price!



Wordworth Extras

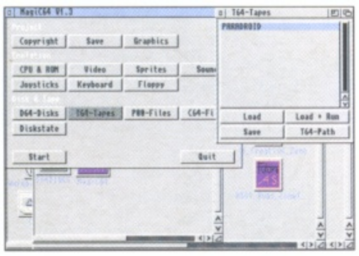


With a new version of Wordworth imminent, what better time than now to secure a set of excellent macros and templates for use with version 3 and above. These extras can help make your documents look smarter, with layouts for things like faxes created by Digita themselves. There are plenty of other extras for Datastore and DOpus users too, plus macros for Final Writer users.

Shopper**Choice**

Something for the weekend? The variety of software on our disk should keep you happy for longer than that!

Application**Zone**



MagicC64

Go retro with this Star buy-winning Commodore C64 emulator. Includes some programs for you to try out and works with or without ROM images.

ANSI-Draw

Another top program for artists who want to draw pictures with letters!

Technical**Zone**

Eight top programs for you to use, including a special encryption program for security and a command to speed up your exec.library.

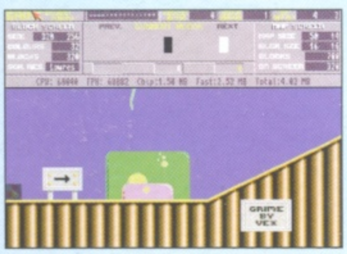
Licenceware

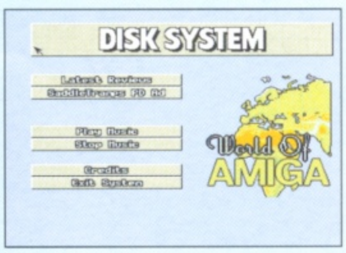
GRIME

An *exclusive* version of this highly commended level editor for games programmers, which is discussed in detail in this month's feature. Can be used with many programming languages. Includes save options that can be used in the full version.

Disk System 3

An *exclusive* version of the new update to the diskmag creation system which won a Star buy in AS56. Enables you to create some very impressive multimedia projects for use on floppy disks. Full documentation is included.





Aural **Synthetica** patches

We have over 150 new patches supplied by the author of this new sample creation package. These patches can be used with the full program, or even with the demo that was included on last month's Coverdisks.

3D**Zone**

There are some excellent objects for both LightWave and Imagine users here. All the objects have been submitted by winners from our Amiga Answers competition – so you know you are in for a real treat!





Plus: *InformationZone, CreativeZone & ProgrammingZone*